Profile of Neonatal Jaundice in Low Birth Weight Infants- Comparison Between AGA and SGA Subgroups

Dissertation Submitted to

THE TAMIL NADU DR.M.G.R MEDICAL UNIVERSITY

In partial fulfillment of the regulations

For the award of the degree of

D.M. (NEONATOLOGY)

2010 – 2013

MADRAS MEDICAL COLLEGE

THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY

CHENNAI

INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI -3

Telephone No : 044 25305301
Fax : 044 25363970

CERTIFICATE OF APPROVAL

To
Dr. Karvendhan .R
PG in DM Neonatology
Institute of Child Health & Hospital for children
Egmore, Chennai -5

Dear Dr. Karvendhan .R

The Institutional Ethics committee of Madras Medical College, reviewed and discussed your application for approval of the proposal entitled "Profile of neonatal jaundice in low birth weight infants – comparison between AGA and SGA subgroups " No.04092012.

The following members of Ethics Committee were present in the meeting held on 13.09.2012 conducted at Madras Medical College, Chennai -3.

1. Dr. S.K. Rajan. M.D.,FRCP.,DSc -- Chairperson
2. Prof. Pregna B. Dolia MD -- Member Secretary
   Vice Principal, Madras Medical College, Chennai -3
   Director , Institute of Biochemistry, MMC, Ch-3
3. Prof. B. Vasanthi MD -- Member
   Professor of Pharmacology ,MMC, Ch-3
4. Prof. M. Reghu MD -- Member
   Director, Inst. Of Internal Medicine, MMC, Ch-3
5. Prof. MD. Ali. MD.DM -- Member
   Prof & HOD of MGE, MMC, Ch-3
6. Prof. P. Karkuzhali. MD -- Member
   Director i/c, Prof., Inst. of Pathology, MMC, Ch-3
7. Prof. Bavani Shankar. MS -- Member
   Prof of General Surgery, MMC, Ch-3
8. Thiru. S. Govindsamy. BABL -- Lawyer
9. Tmt. Arnold Soulina MA MSW -- Social Scientist

We approve the proposal to be conducted in its presented form.

Sd/ Chairman & Other Members

The Institutional Ethics Committee expects to be informed about the progress of the study, and SAE occurring in the course of the study, any changes in the protocol and patients information / informed consent and asks to be provided a copy of the final report.

Member Secretary, Ethics Committee

CERTIFICATE

This is to certify that the dissertation entitled **"Profile of neonatal jaundice in low birth weight infants- comparison between AGA and SGA subgroups "** is a bonafide work done by **Dr.Karvendhan R** during the period between AUG 2012– JAN 2013 towards the partial fulfillment of requirement for the award of D.M. (NEONATOLOGY) degree examination to be held in August 2013 by The Tamilnadu Dr.M.G.R. Medical University, Chennai.

Prof. Dr. J.KUMUTHA,

Prof., and H.O.D. of Neonatology,

Institute of Child Health,

Madras Medical College, Chennai.

Prof. Dr.M. KANNAKI

Director & Superintendent,

Institute of Child Health,

Madras Medical College, Chennai.

Prof.DR.V.KANAGASABAI

Dean,

Madras Medical College, Chennai.

DECLARATION

I solemnly declare that the dissertation entitled **"Profile of neonatal jaundice in low birth weight infants-comparison between AGA and SGA subgroups"** is the original work done by me at the Institute of Obstetrics and Gynaecology and Hospital for women and Children, Egmore, Chennai during the D.M. course (2010-2013), under the guidance and supervision of Prof.Dr.J.Kumutha, Professor and H.O.D. of Neonatology and Dr. S.Mangalabharathi, Assistant Professor of Neonatology . The dissertation is submitted to **THE TAMILNADU Dr.M.G.R. MEDICAL UNIVERSITY** towards the partial fulfillment of requirement for the award of **D.M. (Neonatology).**

Place: Chennai. (Dr.Karvendhan R)

Date:

ACKNOWLEDGEMENT

It gives me immense pleasure to express my deep sense of gratitude to **Prof.J.Kumutha,** Prof. and H.O.D. of Neonatology, for her able guidance during the course of the study and in preparation of this dissertation.

I sincerely thank **Dr.S.Mangalabharathi,** Assistant Professor of Neonatology, for his guidance in designing and carrying out the trial.

I sincerely thank my professors **Prof.Dr.Rema Chandramohan** and **Prof.Dr.B.I.Sasirekha** for their constant encouragement and support in completing this study.

I express my thanks to Assistant Professors **Dr.Duraiarasan, Dr.Perumal Pillai,** and **Dr.Dilli Kumar** for their encouragement during the course of study.

I thank **Prof.Dr.M.Kannaki** Director and Superintendent, Institute of Child Health and Hospital for Children, Egmore and **Prof.Dr.Meenalochani,** Director& Superintendent, Institute of Obstetrics & Gynecology, Egmore for permitting me to use all resources for my dissertation work.

I thank the pediatric residents, particularly Dr Francine Shirley and Dr Vinodalatha for helping to complete this study.

I thank my fellow postgraduates and juniors and staff nurses for helping to carry out the trial

I thank my wife **Dr Supriya** for her support towards completing my study successfully. Last but not the least, I heartily thank the babies and their parents for their kind support and cooperation for successful completion of this study.

Karvendhan R

AUTHOR DETAILS

PRINCIPAL INVESTIGATOR: **DR.KARVENDHAN R**

D.M. (Neonatology) Resident,

Dept. of Neonatology,

Institute Of Child Health, Madras Medical College,

Egmore, Chennai.

GUIDE: **PROF. DR. J.KUMUTHA**,

Professor & Head of Dept.,

Dept. of Neonatology,

Institute of Child Health, Madras Medical College,

Egmore, Chennai.

CO- GUIDE: **DR. S.MANGALABHARATHI**

Assistant professor of Neonatology,

Dept. of Neonatology,

Institute of Child Health, Madras Medical College,

Egmore, Chennai.

Turnitin Originality Report

Profile of neonatal jaundice in low birth weight infants-comparison between AGA and SGA subgroups by Karvendhan Ramasamy 16103004 D.M. Neonatology

From Medical (TNMGRMU APRIL 2013 EXAMINATIONS)

Similarity Index	Similarity by Source	
12%	Internet Sources:	9%
	Publications:	9%
	Student Papers:	1%

Processed on 27-Mar-2013 00:42 IST
ID: 315455268
Word Count: 6015

sources:

1 3% match (Internet from 20-Jun-2009)
http://www.indianpediatrics.net/jan2008/jan-13-15.htm

2 2% match (Internet from 16-May-2011)
http://books.nap.edu/openbook.php?record_id=10841&page=203

3 1% match (publications)
Charles I Okwundu, "Prophylactic phototherapy for preventing jaundice in preterm very low birth weight infants", Cochrane Database of Systematic Reviews Protocols, 07/08/2009

4 1% match (Internet from 08-Sep-2009)
http://www.icumed.com/Docs-AgClave/M1-1211_Antimicrobial_CLAVE_Efficacy_Reports.pdf

5 1% match (Internet from 02-Feb-2010)
http://www.newbornwhocc.org/pdf/iugr_new.pdf

6 1% match (publications)
Chocano-Bedoya, Patric, "Micronutrient intake and premenstrual syndrome", Proquest, 2012.

7 < 1% match (publications)
Maisels, M J, J F Watchko, V K Bhutani, and D K Stevenson, "An approach to the management of hyperbilirubinemia in the preterm infant less than 35 weeks of gestation", Journal of Perinatology, 2012.

8 < 1% match (Internet from 17-Jun-2011)
http://minskclinic.info/studies/1-2-blooddisorders/study169.php

9 < 1% match (Internet from 22-Mar-2012)
http://fn.bmj.com/content/88/6/F459.full

CONTENTS

1. Introduction

A newborn infant weighing less than 2500g at birth is termed as low birth weight (LBW) neonate[1]. Low birth weight in newborn infant occurs due to intrauterine growth restriction (IUGR)/small for gestational age (SGA) or prematurity.

Although quantification and data on global distribution of LBW remain limited, World Health Organization estimates that nearly 20 million LBW infants are born every year, affecting approximately 16 percent of all newborns in developing countries[2]. Around 8% of live births are born LBW and 12% of live births are preterm in the USA[3].

UNICEF estimates put the incidence of LBW neonates in India at 30% while the proportion of IUGR has been found to be 54%[4]. As per the National Neonatal Perinatal Database (NNPD) of the National Neonatology Forum (NNF) the incidence of LBW in tertiary care centres was 31.3% and 9.65% were SGA infants[5].It is estimated that nearly 8 million LBW infants are born each ear in India [6,7].

This shows that the major low birth weight problem in India stems from intrauterine growth restriction and not prematurity, in contrast to the western world.

LBW is the most significant factor contributing to neonatal mortality and morbidity. These neonates are at higher risk of asphyxia, sepsis, hypothermia, and feeding problems and neonatal jaundice. Common illnesses tend to be more severe and last longer in this group.

Neonatal jaundice is the yellow discolouration of the sclera and skin of newborn infants caused by unconjugated hyperbilirubinaemia. About 50% of term and 80% of preterm infants develop jaundice in the first week of life [8]. Several risk factors have been identified for the occurrence of exaggerated or severe unconjugated hyperbilirubinaemia. Low birth weight and preterm birth are major risk factors for exaggerated jaundice warranting intervention[9]. Clinically significant levels that warrant treatment occur in nearly 50% to 80% of preterm neonates[10].Preterm infants are at risk of developing bilirubin encephalopathy at lower total serum bilirubin levels than term neonates[9].

The practice parameter published by the American Academy of Pediatrics (AAP) is followed for the management of neonatal hyperbilirubinemia (NNH) in newborn infants 35 weeks or more. The AAP guidelines were framed from data available from babies weighing 2500g or more at birth. [11]

Low birth weight (LBW) babies constitute nearly one third of live births in our country as mentioned earlier. Small for Gestational Age (SGA) infants make up to two thirds of these LBW babies in India unlike the industrialized countries where most of the LBW infants or preterm but not growth restricted.[4]

Although both the terms IUGR and small for gestational age (SGA) are used interchangeably, there is a minor difference in the terminology. Small for gestational age is a statistical definition, and is used for neonates whose birth weight is lower than 10th percentile for the particular gestational age. IUGR is a clinical definition and includes neonates with clinical evidence of malnutrition and recognized growth restriction during antenatal growth monitoring.[12]

Data on neonatal jaundice in LBW infants is scarce. There is particularly no data available about the profile of neonatal jaundice in SGA infants. Whether the 'accelerated maturity' of liver enzymes and its effect on bilirubin metabolism and ultimately its toxicity means these babies can handle bilirubin similar to their age matched appropriate weight infants is not well established.

There is no consensus yet on management of neonatal hyperbilirubinemia whether it should be gestational age based as maturity of liver enzyme UDP glucuronyl transferase handling bilirubin conjugation is gestational age dependent[13] or weight based as is the more widely prevalent current practice.

2. Aims and objectives

1. To study the incidence, risk factors, duration, interventions and bili-rubin toxicity of neonatal jaundice in low birth weight infants

2. To compare the profile of jaundice in LBW infants between the AGA and SGA subgroups

3. Review of Literature

Infants of small size have been described from the 1750s, though prematurity was thought be the only cause till the mid 20th century. The World Health Organization even in 1950 labelled all infants weighing less than 2500g at birth as preterm.[14] The recognition that some infants less than 2500g were not preterm, but were 'undernourished full term infants' first occurred in 1947[15]. In 1966 the average growth patterns from 28 weeks were published, highlighting reduced growth in some babies associated with maternal smoking, multiple pregnancies and fetal malformations [16].

Nomenclature and definition:

A newborn infant weighing less than 2500g at birth is termed as low birth weight (LBW) neonate[1]. Low birth weight in newborn infant results due to intrauterine growth restriction (IUGR)/small for gestational age (SGA) or prematurity. IUGR is defined as an infant that has not reached its growth potential[17].In contrast small for gestational age (SGA) is statistical concept based on the distribution of birth weight within a population.The cut off for SGA is usually the 10^{th} centile for age.

Incidence of Low Birth Weight:

Although reliable data on the quantum and global distribution of LBW remain limited, World Health Organization estimates that more than 20 million LBW infants are born every year, affecting nearly 16 percent of all newborns in developing countries[2].

Around 8% of babies born in the USA are LBW and 12% [3].

The incidence of LBW neonates is 30% in India while the proportion of IUGR term infants has been found to be 54%[4]. As per the National Neonatal Perinatal Database of the National Neonatology Forum, India, the incidence of LBW in tertiary care centers was 31.3% and 9.65% were SGA infants. 31% of LBW infants were SGA. Preterm LBW infants were ~ 78% and term LBW infants were 22% [5]. 45.4% babies born at PGIMER, Chandigarh during the year 2003 were LBW *.

*Unpublished data

Table 3.1: Country wise incidence of LBW and preterm births [2]

Country	LBW % live births	IUGR(% of live births)	Preterm Birth(% of live births)
Argentina	6.3	9.7	7.2
China	4.2	9.4	7.5
Colombia	16.1	17.8	15.7
Cuba	8.1	14.7	7.2
Gambia	12.1	13.5	13.5
India	**28.2**	**54.2**	**9.7**
Indonesia	10.5	19.8	18.5
Ireland	5.6	6.9	6.2
Malawi	11.6	26.1	8.2
Nepal	14.3	36.3	15.8
Sri Lanka	18.4	34.0	14.0
Thailand	9.6	17.0	21.3
UK	6.2	12.3	4.6
US	6.0	6.9	9.3

80 lac LBW infants are born each year in India and around one half to three fourths of them are delivered at full term of gestation [4,6,7].This shows that the major low birth weight problem in India stems from intrauterine growth restriction and not prematurity, in contrast to the western world.

Intrauterine Growth Restriction/Small for Gestational Age status vs. Preterm birth and effects on mortality and morbidity:

Premature and IUGR infants have both independent and common problems. Constitutionally small infants are unlikely to have increased morbidity. At lower gestational ages, the problems of prematurity have a major influence on the outcome of both AGA and SGA infants[29]. However more mature preterm or term infants may be affected more by the impact of growth restriction. They have a higher rate of problems like asphyxia, hypothermia, hypoglycemia, polycythemia and sepsis [29, 30]. All of these are risk factors for significant hyperbilirubinemia and bilirubin toxicity[11]. However, even though the concept of accelerated maturity in stressed IUGR infants is being questioned now[31], these infants may have mature UDPGT better able to handle bilirubin in the immediate postnatal period.

Neonatal Jaundice in LBW infants:

Around 60 % term and almost all preterm infants develop some clinical jaundice during the first week of life[11]. NICHD network reported 77% of VLBW infants receiving phototherapy[18]. A study from North India reported that 76.6% infants weighing <1500g developed jaundice requiring phototherapy[19]. 57% of late preterm babies 10.8% of whom were SGA developed jaundice requiring phototherapy in a study reported from Hyderabad [20]. Another study from north western India looking at the profile of jaundice in

in born infants reports that four hundred and eighty two out of 1400(34.5%) of low birth weight babies (< 2500 g) developed significant NNJ [33]. LBW infants being a disparate group and definition significant jaundice varying according to the phototherapy protocols used, there are no studies reporting the epidemiology of jaundice in all LBW infants. 6% of infants developed hyperbilirubinemia, according to the NNPD[5]. Hyperbilirubinemia was defined as serum bilirubin level more than 15 mg/dl. The database though does not report on neonatal jaundice in LBW infants.

Management of neonatal jaundice in Low birth Weight Infants:

It is a general belief that preterm and LBW infants are at increased risk of developing bilirubin associated brain damage than term infants, [21, 22] estimating the magnitude of this risk has proven elusive, and there is no consensus among experts on the concentration of total serum bilirubin at which treatment should be started.[23]

The AAP hour specific nomogram for management of neonatal hyperbilirubinemia in term and near term infants is based on data from infants 35 weeks and more and weighing >2500g[11]. However this recommendation is still used for all infants 35 weeks or more irrespective of weight.

The management of jaundice in infants < 35 weeks gestational age is varied. Weight based guidelines include the Maisels chart[15], Cashore chart[24] and Cockington chart[25]. Another commonly used guideline is to start phototherapy at serum bilirubin level in mg/dl of 0.75% of weight in grams and to perform exchange transfusion at 1% of body weight in grams.[26]

Table3. 2 : Maisels chart for management of jaundice in preterm LBW infants[15]

Weight (g)	Phototherapy (mg/dl)	Exchange transfusion(mg/dl)
<1000	5-7	10-12
1000-1500	7-9	12-15
1500-2000	10-12	15-18
2000-2500	13-15	18-20

An example of gestational age based management of jaundice in LBW/preterm infants is the Ives' chart[27]

Table 3.3 : Gestational age based guidelines for management of preterm jaundice[27]

Gestational age	Phototherapy	Exchange transfusion	
Weeks	mg/dl	Sick	Well
36	15	17.5	20
32	8.5	15	17.5
28	6.0	11.5	15
24	5.0	8.5	11.5

So, the range of bilirubin thresholds recommended for treatment is very wide. Recognizing the need, the AAP in 2007 asked a panel of experts to define a guideline for the management of jaundiced infants <35 weeks of ges-

tation. As evidence for compiling guidelines is lacking, the group of experts have made a consensus based recommendation [28].

Table 3. 4 : Suggested use of phototherapy and exchange transfusion in preterm Infants <35 weeks gestational age[28]

Gestational age(Wks)	Phototherapy(mg/dl)	Exchange transfusion
$<28^{0/7}$	5-6	11-14
$28^{0/7}$-$29^{6/7}$	6-8	12-14
$30^{0/7}$-$31^{6/7}$	8-10	13-16
$32^{0/7}$-$33^{6/7}$	10-12	15-18
$34^{0/7}$-$34^{6/7}$	12-14	17-19

So the management thresholds are being prescribed for gestational age rather than birth weight now.

Risk factors for significant jaundice:

Factors leading to significant neonatal jaundice requiring phototherapy have been studied in late preterm and term infants [32].Only one study has looked at the risk factors for significant jaundice in late preterm low birth weight infants and found SGA, sibling jaundice and OA setting to be associated with significant jaundice [20].

4. Justification for the study

Low birth weight infants make up around 30 % of live births in our country and small for gestational age infants form a higher proportion of these infants. Neonatal jaundice occurs in most of the preterm and about 60% of term babies. There are currently no studies available about the profile of neonatal jaundice in these infants nor are there guidelines on the management of neonatal jaundice in them due to lack of evidence. This study was planned to study the profile of neonatal jaundice in these infants.

5. Materials and methods

Study type: Prospective descriptive study

This study was conducted between September 2012 and January 2013 at the Department of Neonatology, Institute of Obstetrics and Gynecology and Government Hospital for Women and Children, Egmore, Chennai.

All consecutively born infants with birth weight <2500g were eligible for inclusion in the study. The babies were recruited after informed consent from the parents. The gestational age was calculated from LMP/ First trimester USG and corroborated by New Ballard Scoring. Assignment to Appropriate for Gestational Age (AGA) or Small for Gestational Age (SGA) was done based on AIIMS intrauterine growth chart.[5,14]

The infants were classified as AGA if the weight for GA was between the 10th to 90th centile and SGA if the weight was less than the 10th centile for the GA.AIIMS chart was used as it was constructed with data from Indian infants and that is the chart used by NNF for data collection for National Neonatal Perinatal Data Base (NNPD).

The relevant perinatal and neonatal data were recorded prospectively in a predesigned case reporting form. Maternal anthropometry, pregnancy associated illnesses, perinatal data and postnatal morbidities along with total bilirubin values were recorded.

Capillary blood sample was collected from recruited babies at 24 hours (24-36), 48 hours (48-60), and 72 hours (72-84) and on day 5 of life in heparinized micro-capillaries.

Bilirubin estimation:

The bilirubin estimation was done by sphectrometric bilirubin analyzer (Bil-Micro Meter,Kohsoku Denki Co Ltd, Tokyo,Japan).

The micro-capillary tube containing the blood sample was blocked on one end and centrifuged at 12,000 rpm for 5 minutes in a micro centrifuge to separate out the serum.

The processed microcapillary was fixed on to the holder of spectrometric bilirubin analyzer ensuring the serum column covered the entire length of the slit through which the light passes.

A microprocessor converts the light intensity received by the photo detector into the total bilirubin value which is digitally displayed. This method for estimation of bilirubin is simple, requires no reagents and needs only 50-70 µL of blood.

The analyzer was calibrated as recommended by the manufacturer.

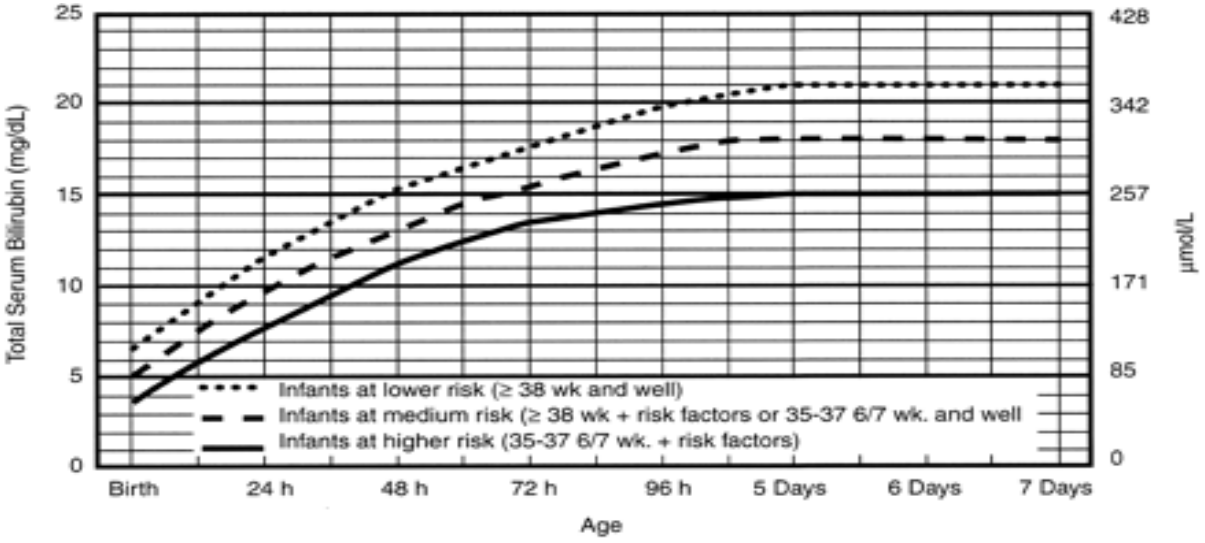
Other investigations:

If the maternal ABO blood group is either O or Rhesus negative the blood group of the baby was also determined. All the infants with bilirubin level in phototherapy range were assessed for hemolysis with peripheral blood smear, reticulocyte count and direct antiglobulin test

Management of hyperbilirubinemia:

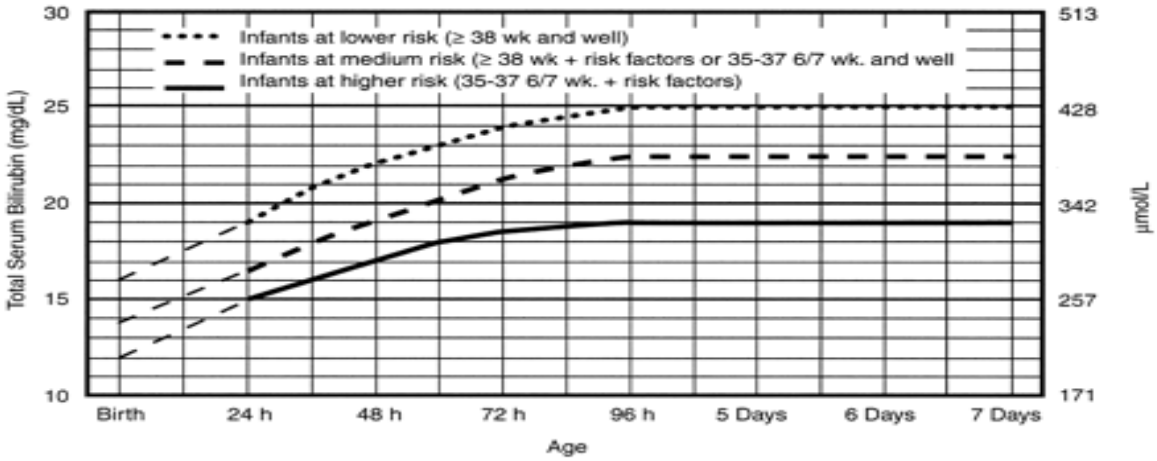
If bilirubin levels warranted management, treatment was based on AAP guidelines for babies with GA 35 wk or more and weight based on Maisels chart in babies with GA<35.

Figure 5.1.Guidelines for phototherapy: 11



- Use total bilirubin. Do not subtract direct reacting or conjugated bilirubin.
- Risk factors = isoimmune hemolytic disease, G6PD deficiency, asphyxia, significant lethargy, temperature instability, sepsis, acidosis, or albumin < 3.0g/dL (if measured)
- For well infants 35-37 6/7 wk can adjust TSB levels for intervention around the medium risk line. It is an option to intervene at lower TSB levels for infants closer to 35 wks and at higher TSB levels for those closer to 37 6/7 wk.
- It is an option to provide conventional phototherapy in hospital or at home at TSB levels 2-3 mg/dL (35-50mmol/L) below those shown but home phototherapy should not be used in any infant with risk factors.

Figure 5.2.Guidelines for exchange transfusion: [11]



- The dashed lines for the first 24 hours indicate uncertainty due to a wide range of clinical circumstances and a range of responses to phototherapy.
- Immediate exchange transfusion is recommended if infant shows signs of acute bilirubin encephalopathy (hypertonia, arching, retrocollis, opisthotonos, fever, high pitched cry) or if TSB is ≥5 mg/dL (85 µmol/L) above these lines.
- Risk factors - isoimmune hemolytic disease, G6PD deficiency, asphyxia, significant lethargy, temperature instability, sepsis, acidosis.
- Measure serum albumin and calculate B/A ratio (See legend)
- Use total bilirubin. Do not subtract direct reacting or conjugated bilirubin
- If infant is well and 35-37 6/7 wk (median risk) can individualize TSB levels for exchange based on actual gestational age.

Table 5.1.Treatment guidelines for infants <35 weeks gestation: [15]

Wt	Phototherapy (mg/dl)	Exchange transfusion(mg/dl)
<1000g	5-7	10-12
1000-1500g	7-9	12-15
1500-2000g	10-12	15-18
2000-2500g	13-15	18-20

The irradiance in treating phototherapy units will be checked every two weeks and ensured to remain >15µW/cm2/nm.

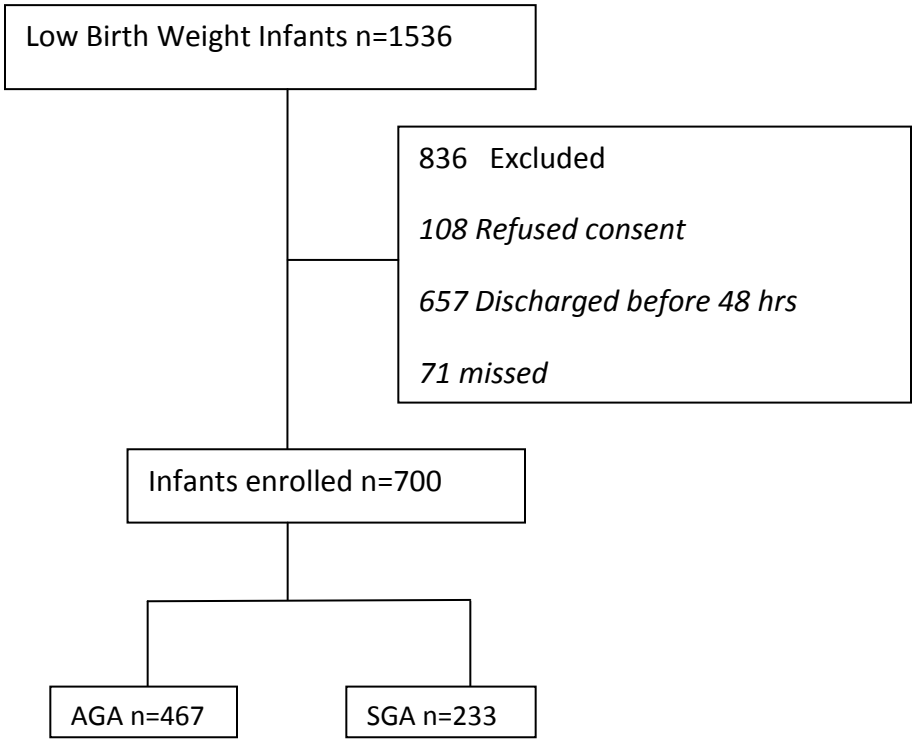
The infants on phototherapy had total serum bilirubin measurements taken 6-12 hours to guide further management and phototherapy was stopped if bilirubin had reached at least 2mg lower than phototherapy range.

Follow up:

Those babies who underwent exchange transfusion and whose bilirubin reached within 2mg/dl of exchange level were considered to have had significant hyperbilirubinemia and were followed up with neurological assessment at 1month of corrected age with Amiel Tison angles and hearing assessment with behavioral assessment audiometry.

6. Results and observations

All babies with birth weight of <2500g born from the 1st September 2012 to 31st January were eligible for enrollment in the study. The study recruited 700 infants in total of the 1536 eligible infants.



Continuous variables were summarized using mean (SD) and categorical variables as frequencies and percentages. The baseline characteristics recorded at recruitment are analyzed.

Maternal characteristics:

Analysis of maternal variables showed no statistical difference between the mothers of AGA and SGA infants with respect to maternal age, parity, maternal weight and maternal height. There was significant difference between these two groups of mothers in the prevalence of anemia (Hb <10g/ dL) (AGA 14.5% vs SGA 22.3%) with SGA group mothers having higher prevalence. There was also higher prevalence of Pregnancy Induced Hypertension (PIH) in the SGA group mothers. (26.6% vs. 20.5%).

Table 6.1: Comparison of maternal characteristics:

Variable	AGA n=467	SGA n=233	p
Maternal age	24.67(4.12)	24.56(4.16)	0.67
Maternal height	152(4.5)	151(4.7)	0.82
Maternal weight	53(5.4)	52(4.6)	0.34
Primipara	299(64.0%)	155(66.5%)	0.29
Consanguinity	30(6.4%)	18(7.7%)	0.38
Anemia*	68(14.5%)	52(22.3)	0.02
Hypothyroidism	12(2.5%)	9(3.8%)	0.08
PIH*	96(20.5%)	62(26.6%)	0.04
GDM	10(2.1%)	3(1.3%)	0.12

Perinatal events:

Mode of delivery, multiple births, Apgar scores at 1 and 5 minutes and perinatal asphyxia (defined as having 1 minute Apgar score <7) were comparable between these two groups with no statistically significant difference. (Table6.6 2)

Table 6. 2: Comparison of Perinatal characteristics:

Variable	AGA n=467	SGA n=233	p
Vaginal delivery	305(65%)	138(59%)	0.62
Caesarean	162(35%)	95(41%)	0.09
Multiple births	8(1.7%)	3(1.3%)	0.78
Apgar 1min	7(1.4)	7(1.2)	0.66
Apgar 5 min	8(0.5)	8(0.8)	0.67
Asphyxia	48(10.2%)	33(14.16%)	0.08

Comparison of recruited infants:

Female infants were slightly preponderant in both the groups (52% and 55%) . Mean birth weight, gestational ages were similar between the two groups. Requirement of respiratory support was found to be different between the groups. More babies in the SGA group needed Oxygen supple-

mentation (4.4 vs. 2.1%). CPAP support was administered to more AGA infants (9.4% vs. 6.0%).

The incidence of sepsis was also different between the groups. Possible sepsis was defined as clinical features of sepsis with negative sepsis screen, probable sepsis as positive sepsis screen and negative cultures and confirmed sepsis as culture positive sepsis. Higher incidence of possible and probable sepsis was recorded in AGA infants. (Table 6.3).

Table 6. 3: Comparison of infants:

Variable	AGA n=467	SGA n=233	p
M:F	48:52	45:55	0.67
Weight*	2035(376)	1983(395)	0.03
GA*	34 (2.7)	36(3.1)	0.02
Term*	161(24%)	169(69%)	0.001
Preterm*	306(74%)	64(31%)	0.001
Asphyxia	48(10.2%)	33(14.16%)	0.08
Sepsis	Possible*:13(2.7%) Probable*:32(6.8%) Confirmed: 7(1.4%)	1(0.4%) 6(2.6%) 2(0.9%)	0.02 0.03

Respiratory support	Oxygen*:10(2.14%) CPAP*: 44(9.4%) IMV: 29((6.2%)	11(4.7%) 14(6.0%) 13(5.5%)	0.05 0.04
Feeding	BM: 377(80.7%) IVF: 12(2.6%) IVF+BM: 78(16.7%)	185(79.3%) 5(2.14%) 43(18.4%)	0.52 0.71 0.32
Time to full feeds(days)	1.74(2.18)	1.75(2.2)	0.52
Deaths	18(3.9%)	11(4.7%)	0.61

Feeding:

All the infants were breast fed or fed only expressed breast milk wherever eligible to receive enteral feeds as per hospital policy. Around 80% infants in both the groups were on full enteral feeds and less than 3% infants in both the groups were only on intravenous fluids during the study period.

Mean serum bilirubin during the first five days:

Serum bilirubin measured at around 24 hours (24-36 hrs), 48 hrs (48-60 hrs), and 72 hours (72-84 hrs) and on day 5 of life was compared.

Comparison of bilirubin levels between AGA and SGA groups:

One third of the 700 LBW infants recruited were SGA. 69% were term infants in the SGA group with only 25% of the AGA infants being of term gestation. There was significant difference in the GA of the infants in the two subgroups. The mean bilirubin values at24, 48, 72 and day 5 were statistically significant with the SGA group recording lower values.

Figure 6.1: Distribution of AGA/SGA among various GA

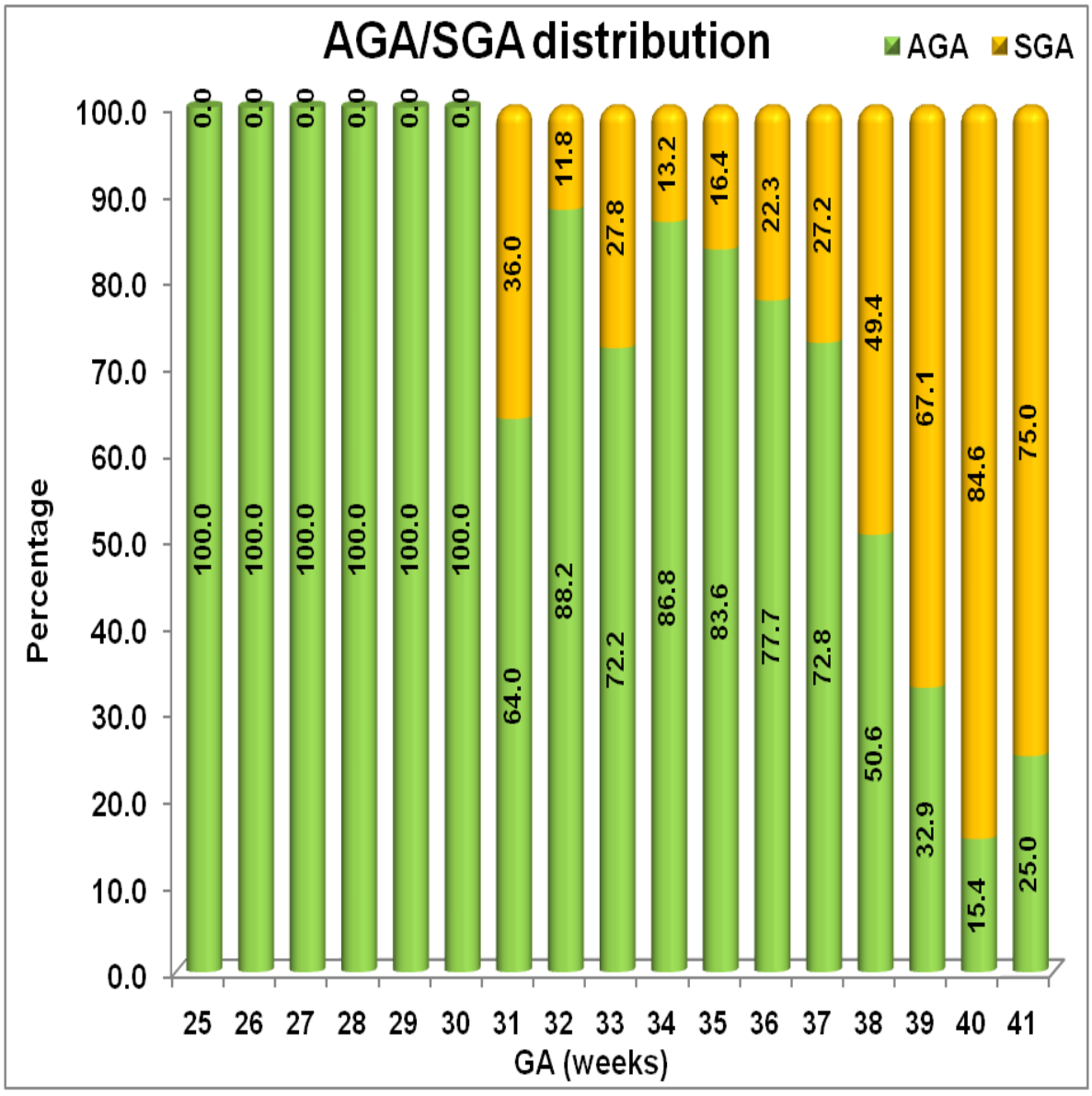
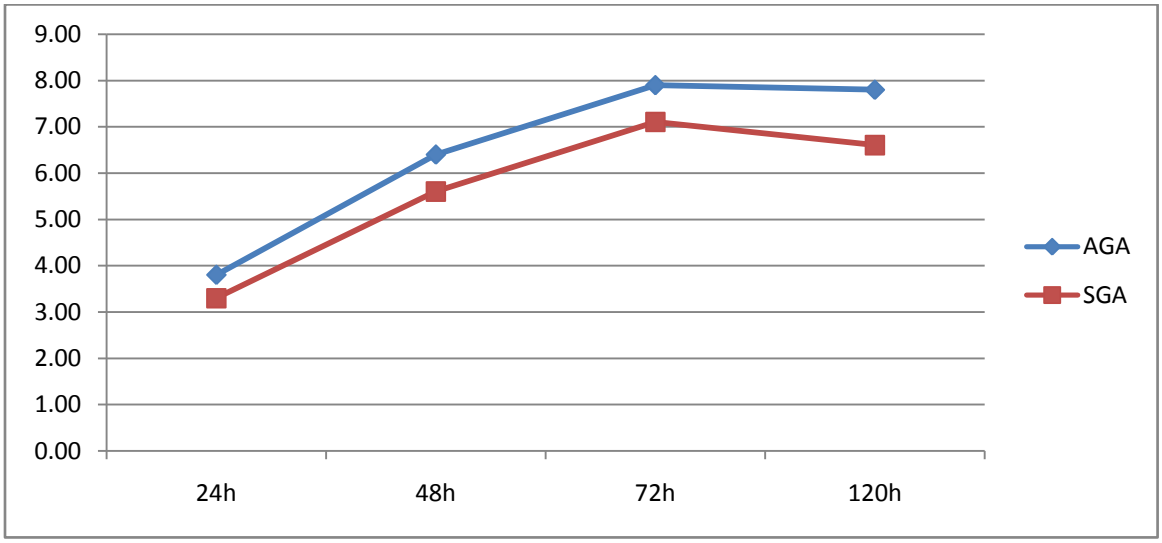


Table 6. 4: Comparison of bilirubin levels between AGA and SGA LBW infants

Group	24h	48h	72h	120h
AGA n=467	3.80(2.73)	6.4(3.34)	7.9(3.5)	7.8(3.5)
SGA n=233	3.3(2.80)	5.6(3.79)	7.1(4.28)	6.6(3.83)
P Value	0.025*	0.005*	0.009*	0.001*

Figure 6.2: Hour specific total Serum bilirubin of AGA and SGA LBW infants

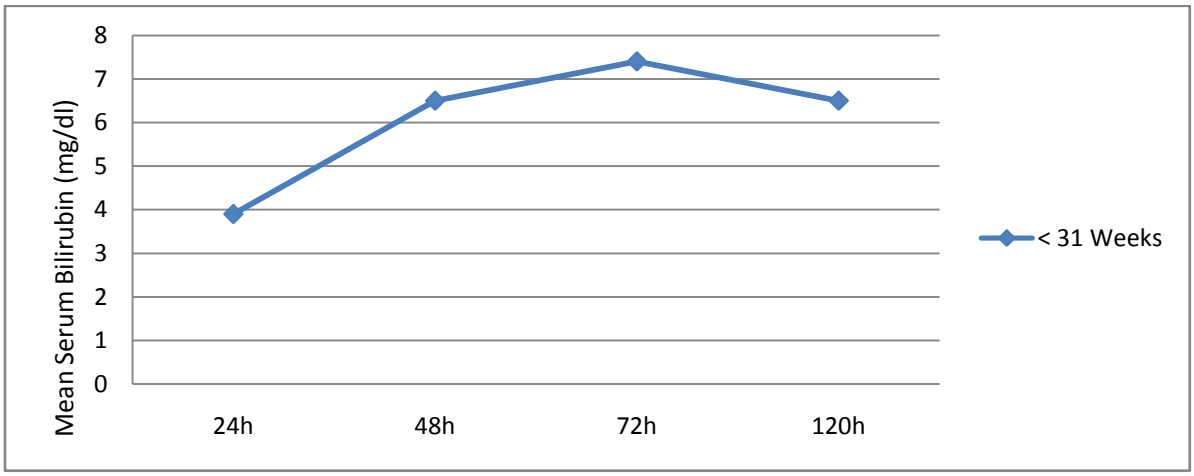


Gestational age wise Bilirubin of AGA and SGA LBW infants:

<31 weeks:

33(4.71%) infants were <31 weeks (25wks=1, 26 wks=1, 27 wks=5, 28wks= 5, 29 wks= 9 and 30wks=12). All of them were AGA in this group. The hour specific bilirubin is depicted.

Figure 6.3 : Hour specific Bilirubin of infants <31 wks GA



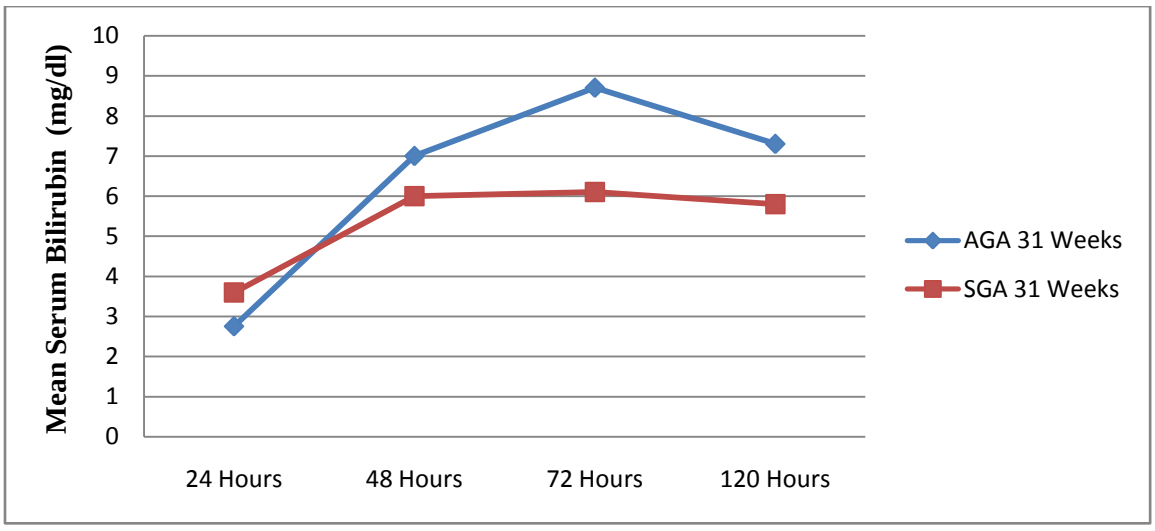
Comparison of serum bilirubin of AGA and SGA subgroups at 31weeks GA

25(3.5%) infants were of 31 weeks gestation with about a 3rd of them being SGA. There was no significant difference in the mean bilirubin levels up to day 5 of life between the two groups.

Table 6.5 : Comparison of serum bilirubin of AGA and SGA subgroups at 31weeks GA

31wk /Groups	24hrs	48hrs	72 hrs	120 hrs
AGA n=16	4.5(2.2)	7.0(2.5)	8.7(1.8)	7.2(3.3)
SGA n=9	3.6(2.1)	5.9(3.72)	6.166(2.16)	5.8(1.37)
P	0.34	0.29	0.006	0.44

Figure 6.4: Hour specific Bilirubin of 31 weeks GA infants



Comparison of serum bilirubin of AGA and SGA subgroups at 32weeks GA

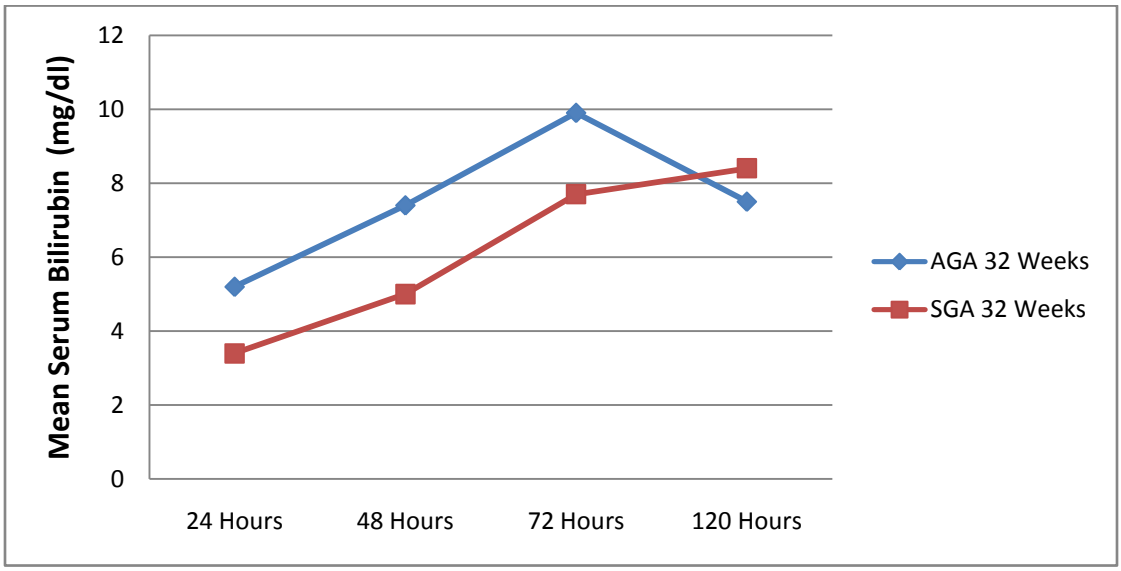
34(4.9%) infants were of 32 weeks gestation with 13% of them being SGA. There was no significant difference in the mean bilirubin levels up to day 5 of life between the two groups.

Table 6.6: Comparison of serum bilirubin of AGA and SGA subgroups at 32weeks GA

32 weeks	24h	48h	72h	120h
AGA n=30	5.19(2.41)	7.42(2.44)	9.89(2.92)	7.4(2.39)
SGA n=9	3.3(2.59)	4.96(2.75)	7.73(1.61)	8.4(2.53)
p	0.16	0.068	0.150	0.44

The peak bilirubin is reached earlier in the AGA group with the 5^{th} day levels becoming lower than the SGA group who have a sustained rise up to day 5

Figure 6.5: Hour specific Bilirubin of 32 weeks GA infants



Comparison of serum bilirubin of AGA and SGA subgroups at 33weeks GA

54(7.7%) infants were of 33 weeks gestation with 38% falling under the SGA group. There was no significant difference in the mean bilirubin levels up to day 5 of life between the two groups.

Table 6.7: Comparison of serum bilirubin of AGA and SGA subgroups at 33weeks GA

33wk/Groups	24	48	72	120
AGA n=39	4.7(2.20)	7.9(2.6)	9.4(3.2)	8.05(2.26)
SGA n=15	4.16(2.84)	7.71(2.99)	10.13(5.2)	6.8(0.85)
p	0.46	0.83	0.56	0.059

Comparison of serum bilirubin of AGA and SGA subgroups at 34weeks GA

9.7 % of total recruited babies were of 34 weeks gestation with 15% falling under the SGA group. There was a rapid rise in bilirubin between 24 to 48 hours in the AGA group making the 48 hour mean bilirubin significantly different between the two groups.

Table 6.8: Comparison of serum bilirubin of AGA and SGA subgroups at 34weeks GA

34 ks/Groups	24h	48h	72h	120h
AGA n=59	3.53(2.72)	6.48(3.90)	7.03(3.59)	7.7(3.79)
SGA n=9	2.54(2.20)	3.43(2.6)	6.1(3.1)	6.17(3.76)
p	0.30	0.037*	0.40	0.26

Figure 6.6: Hour specific Bilirubin of 33 weeks LBW infants

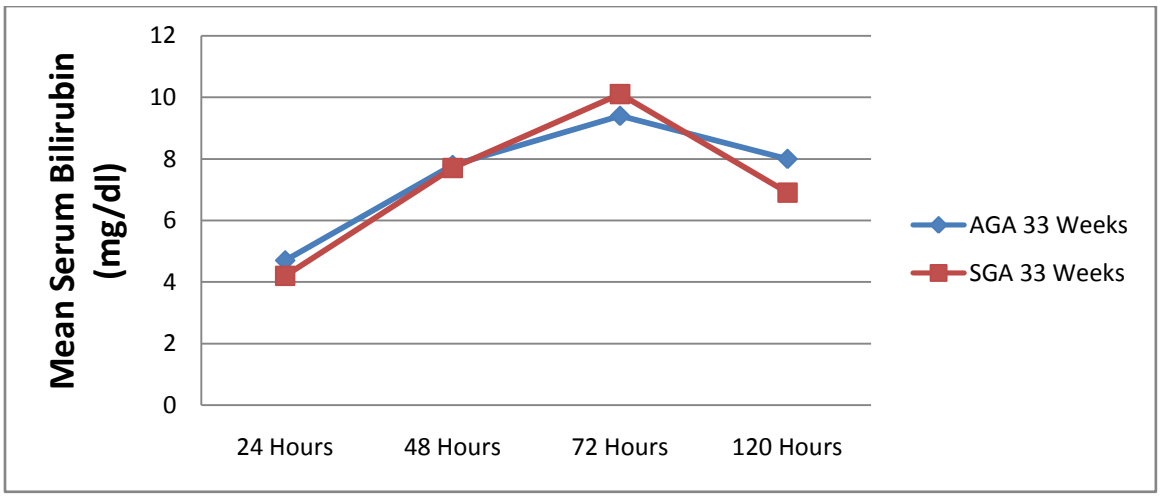
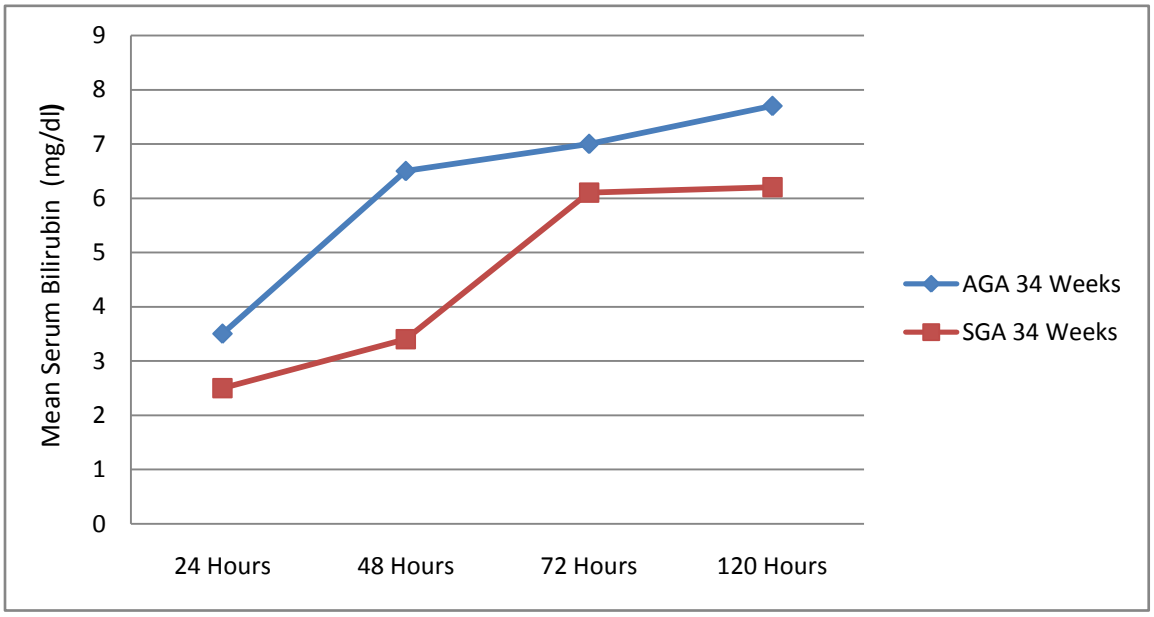


Figure 6.7: Hour specific Bilirubin of 34 weeks LBW infants



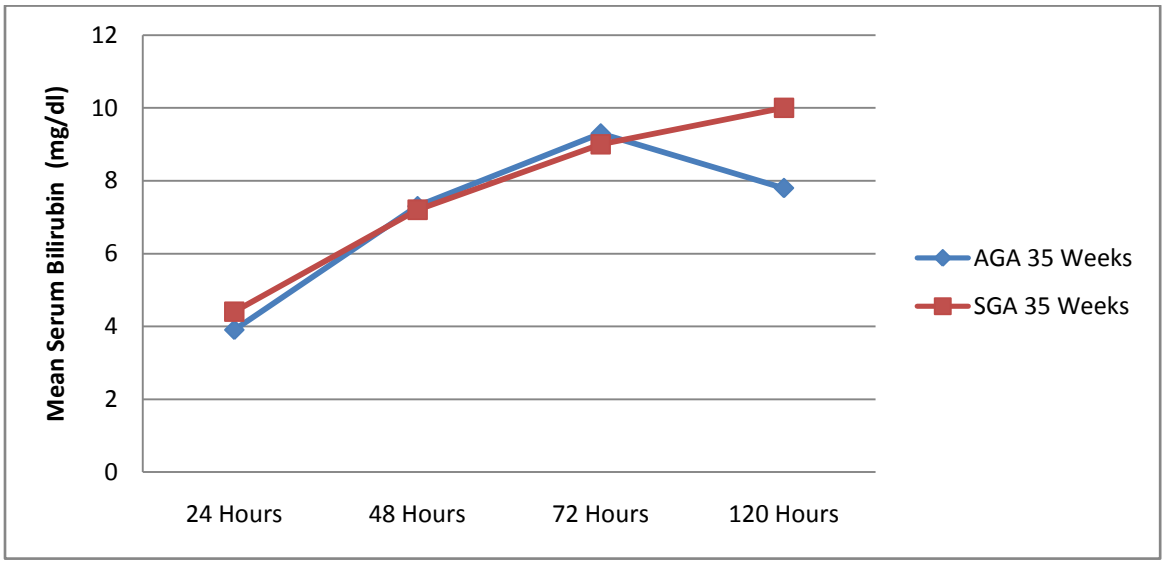
Comparison of serum bilirubin of AGA and SGA subgroups at 35 weeks GA

9.5 % of total recruited babies were of 35 weeks gestation (SGA 20%). There was no significant difference in the mean bilirubin levels up to day 5 of life between the two groups.

Table 6.9: Comparison of serum bilirubin of AGA and SGA subgroups at 35 weeks GA

35 wks/Groups	24h	48h	72h	120h
AGA n=56	3.89(2.75)	7.34(3.31)	9.34(3.7)	7.79(3.18)
SGA n=11	4.43(2.54)	7.2(1.25)	9.0(2.03)	9.9(4.82)
p	0.54	0.94	0.76	0.059

Figure :6.8: Hour specific Bilirubin of 35 weeks LBW infants



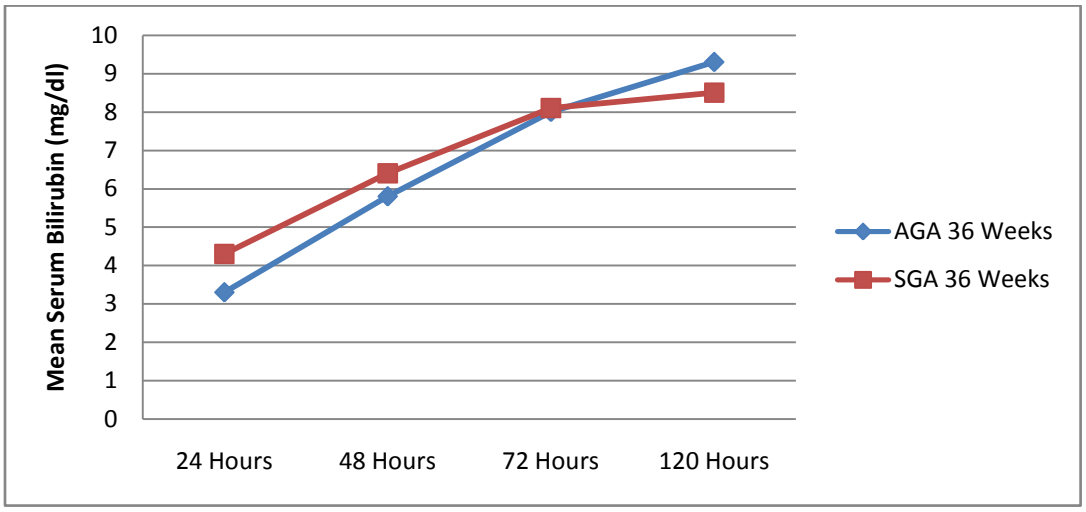
Comparison of serum bilirubin of AGA and SGA subgroups at 36 weeks GA

9.5 % of total recruited babies were of 35 weeks gestation (SGA 20%). There was no significant difference in the mean bilirubin levels up to the 5th day of life between the two groups.

Table 6.10: Comparison of serum bilirubin of AGA and SGA subgroups at 36 weeks GA

36 weeks	24 h	48 h	72 h	120 h
AGA n=73	3.34(2.66)	5.81(3.7)	7.9(3.7)	9.28(4.03)
SGA n=21	4.3(2.8)	6.4(2.9)	8.1(2.7)	8.5(3.3)
p	0.170	0.530	0.720	0.36

Figure 6.9: Hour specific Bilirubin of 36 weeks LBW infants



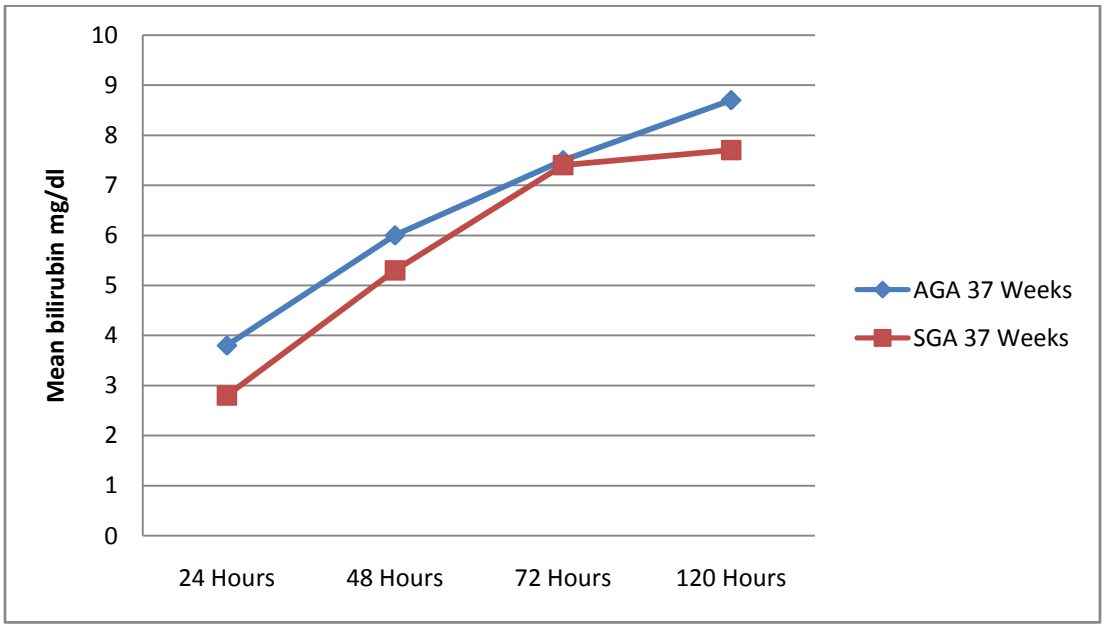
Comparison of serum bilirubin of AGA and SGA subgroups at 37 weeks GA

16 % of total recruited babies were of 37 weeks gestation (SGA 37%). There was no significant difference in the mean bilirubin levels up to the 5th day of life between the two groups.

Table 6.11: Comparison of serum bilirubin of AGA and SGA subgroups at 37 weeks GA

37wks/Groups	24h	48h	72h	120h
AGA n=83	3.8(2.9)	6.0(2.83)	7.5(3.3)	8.7(2.8)
SGA n=31	2.86(2.34)	5.3(3.0)	7.3(3.5)	7.6(3.2)
p	0.10	0.24	0.82	0.150

Figure 6.10 : Hour specific Bilirubin of 37 weeks LBW infants



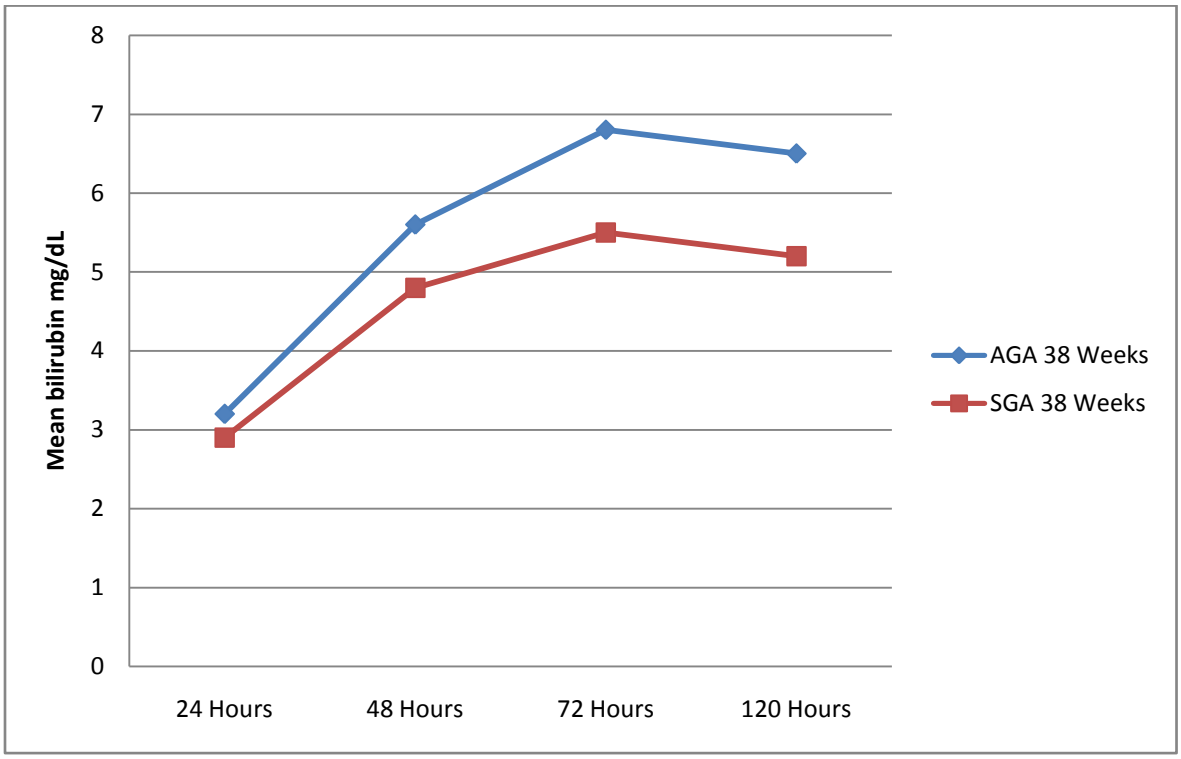
Comparison of serum bilirubin of AGA and SGA subgroups at 38 weeks GA

13 % (89) of total recruited babies were of 38 weeks gestation (SGA nearly 50%). There was no significant difference in the mean bilirubin levels up to the 5th day of life between the two groups.

Table 6.12 : Comparison of serum bilirubin of AGA and SGA subgroups at 38 weeks GA

38 Wks/Groups	24h	48h	72h	120h
AGA n=45	3.2(2.9)	5.6(3.9)	6.8(3.7)	6.5(4.5)
SGA n=44	2.9(3.0)	4.8(4.4)	5.5(3.8)	5.2(3.9)
p	0.590	0.410	0.103	0.140

Figure 6.11: Hour specific Bilirubin of 38 weeks LBW infants



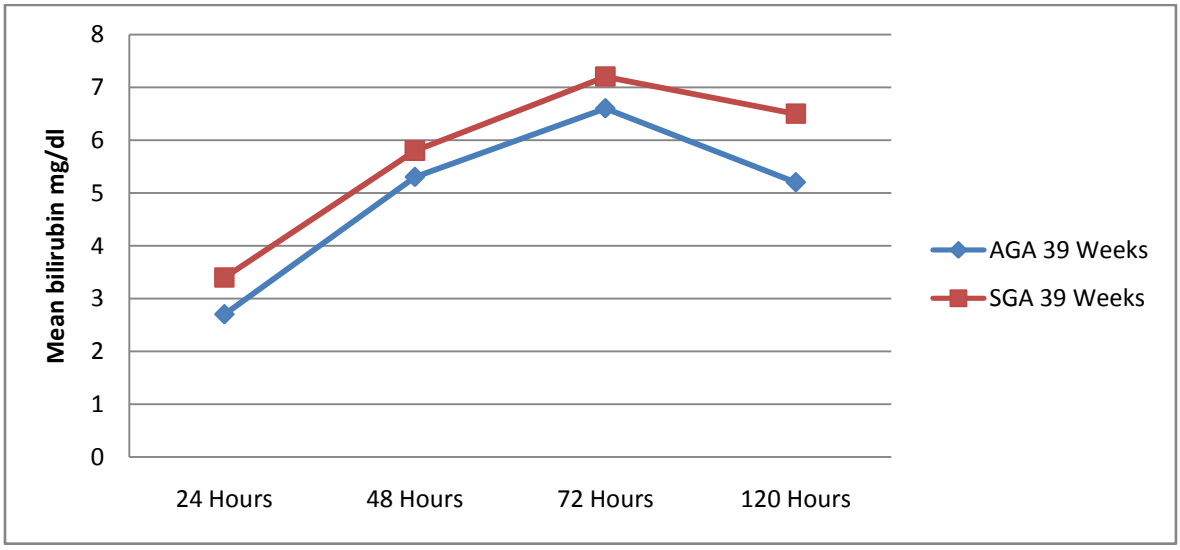
Comparison of serum bilirubin of AGA and SGA subgroups at 39 weeks GA

11 % (79) of total recruited babies were of 39 weeks gestation with nearly 2/3rd of them being SGA .There was no significant difference in the mean bilirubin levels up to the 5th day of life between the two groups.

Table 6.13 : Comparison of serum bilirubin of AGA and SGA subgroups at 39 weeks GA

39 wks/Groups	24h	48h	72h	120h
AGA n=26	2.7(2.3)	5.3(3.7)	6.1(4.1)	5.1(3.8)
SGA n=53	3.4(3.0)	5.8(3.9)	7.2(5.10	6.5(4.3)
p	0.32	0.530	0.600	0.190

Figure 6.12: Hour specific Bilirubin of 39 weeks LBW infants



Comparison of serum bilirubin of AGA and SGA subgroups at 40 weeks GA

6 % (39) of total recruited babies were of 40 weeks gestation with 85% of them belonging to the SGA group .There was no significant difference in the mean bilirubin levels up to the 5th day of life between the two groups.

Table 6.14 : Table : Comparison of serum bilirubin of AGA and SGA sub-groups at 39 weeks GA

40wks/Groups	24h	48h	72h	120h
AGA n=6	1.5(3.10	3.8(2.8)	5.1(2.3)	5.4(1.8)
SGA n=33	2.8(2.8)	4.7(4.6)	6.5(4.10	4.58(3.4)
p	0.33	0.65	0.55	0.58

Figure 6.13: Hour specific Bilirubin of 40 weeks LBW infants

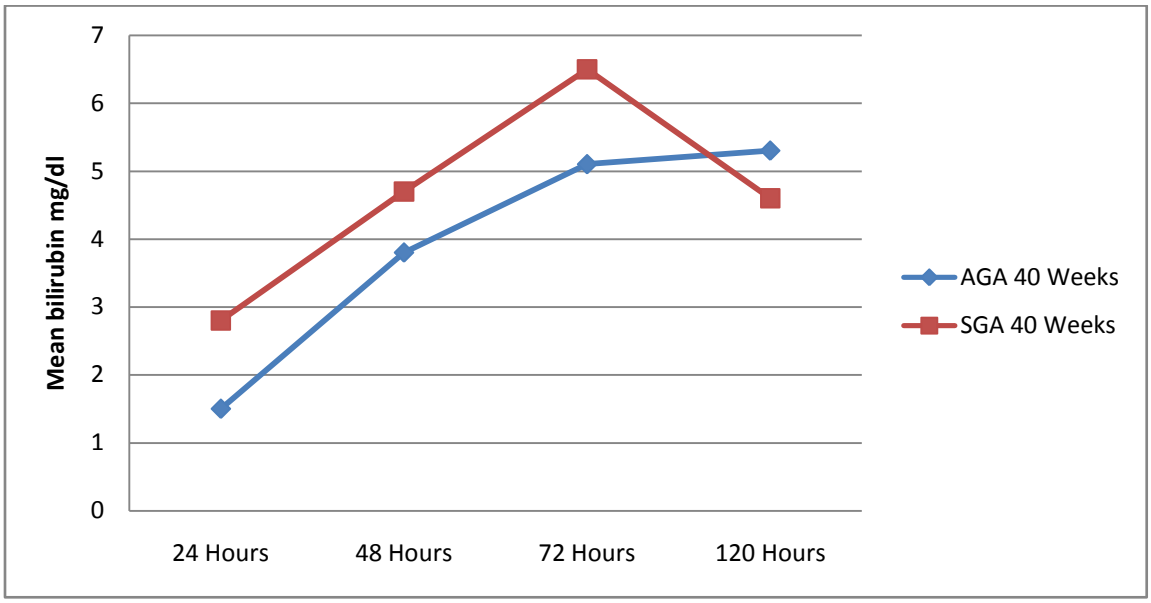
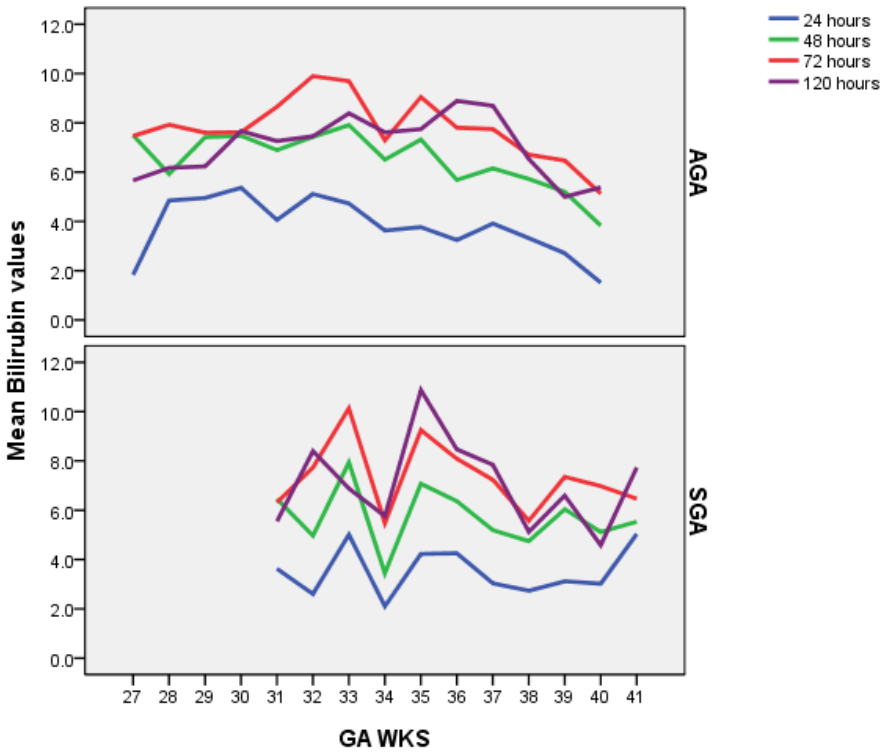


Figure 6.13 A:Mean bilirubin values across GA



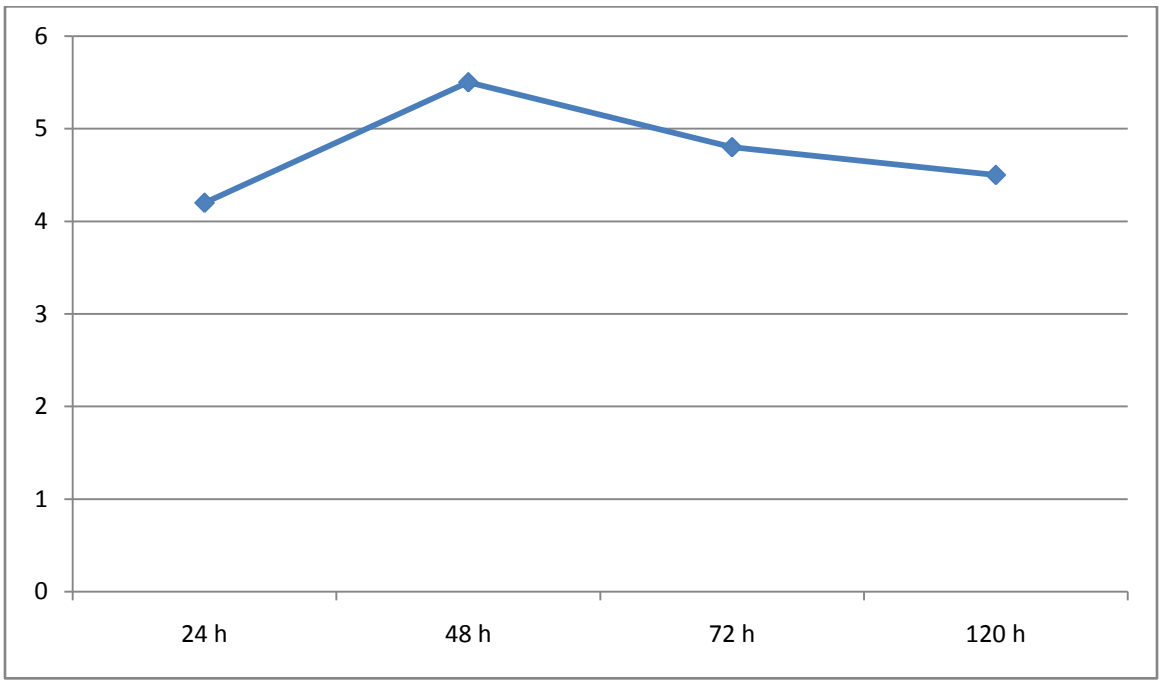
Bilirubin and birthweight:

The LBW infants were then categorized into 5 groups based on their birth weights as <1000g, 1000-1499g, 1500-1999g and 2000-2499g.

<1000g birth weight group:

There were 10 babies in this category (AGA 7, SGA 3). The hour specific mean bilirubin is depicted here.

Figure 6.14. Hour specific bilirubin of <31 weeks infants



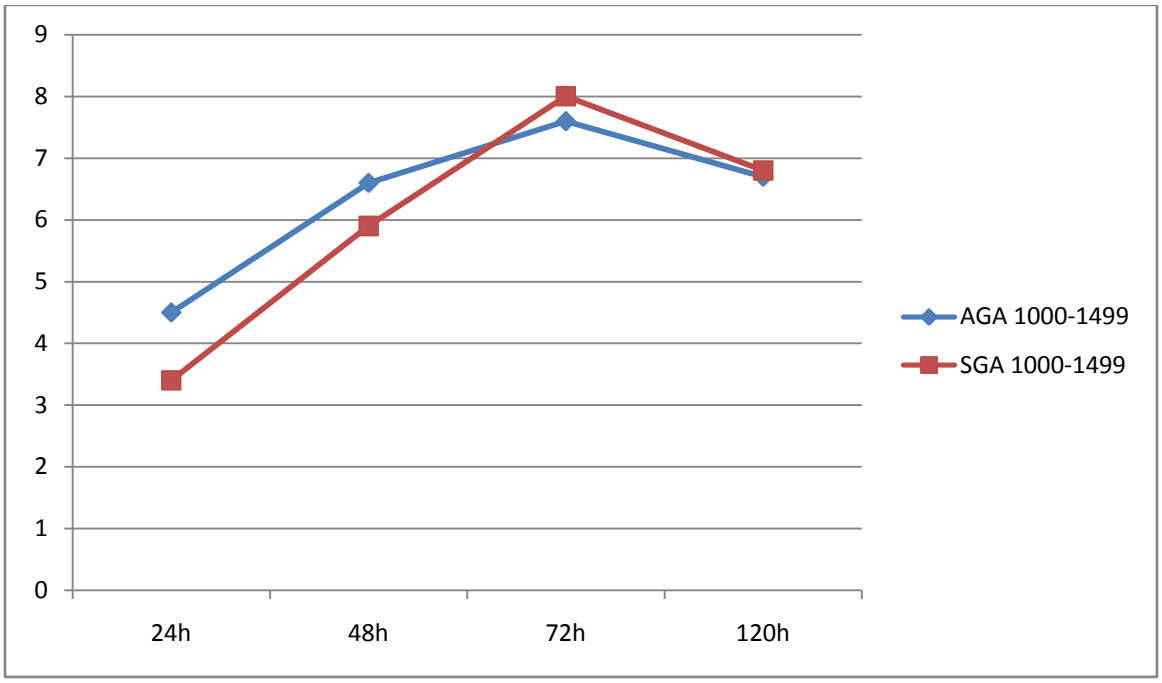
1000-1499g:

Table 6.15: Comparison of bilirubin between AGA and SGA subgroups in 1000-1499g infants

1000-1499g	24h	48h	72h	120h
AGA n=38	4.5(2.6)	6.6(2.6)	7.6(2.7)	6.7(2.5)
SGA n=40	3.4(2.5)	5.9(3.1)	8.0(3.6)	6.8(2.3)
p	0.06	0.25	0.610	0.880

11% babies were in this category with almost even distribution among the AGA and SGA subgroups. 24 hr bilirubin values showed a trend towards significant difference but there was no significant difference at other times.

Figure 6.15 : Serum bilirubin of AGA and SGA subgroups in the 1000-1499g weight category



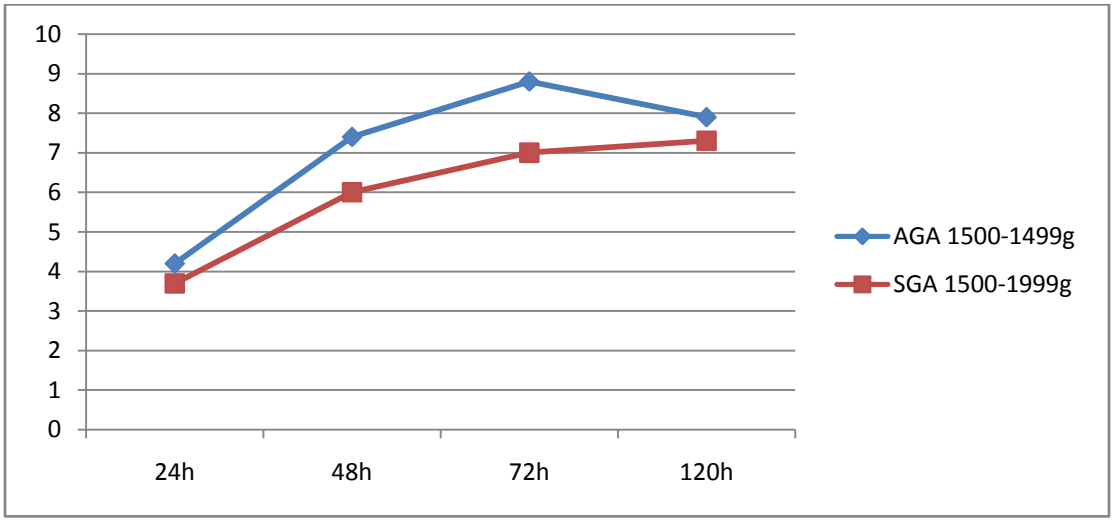
1500-1999g group:

Table 6.16: Comparison of bilirubin between AGA and SGA subgroups in 1500-1999g infants

1500-1999g	24h	48h	72h	120h
AGA n=139	4.2(2.7)	7.4(3.3)	8.8(3.5)	7.9(3.2)
SGA n=73	3.7(3.0)	6.0(3.7)	7.0(3.8)	7.3(4.0)
p	0.29	0.005*	0.001*	0.21

212(30%) babies belonged to this group with 1:2 distributions between SGA and AGA subgroups. There was statistically significant difference in the bili-rubin levels from 48 to 72 hours with SGA infants having lower levels.

Figure 6.16: Serum bilirubin of AGA and SGA subgroups in the 1500-1999g weight category



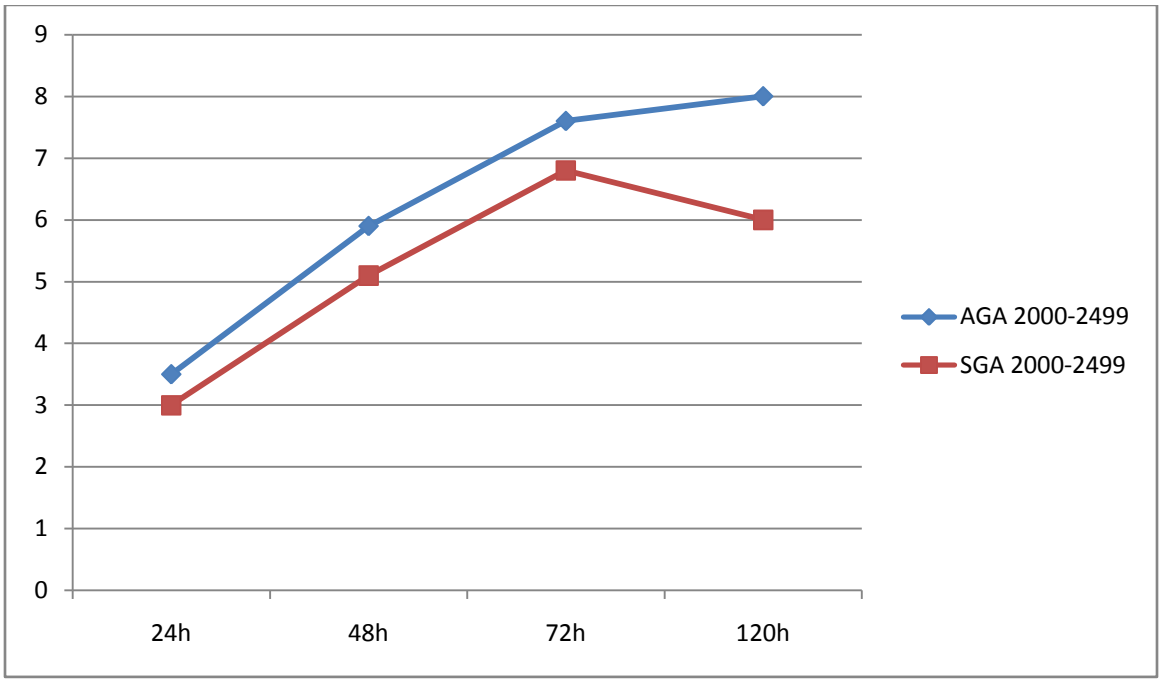
2000-2499g:

Table: 6.17: Comparison of bilirubin between AGA and SGA subgroups in 2000-2499g infants

2000-2499	24h	48h	72h	120h
AGA n=289	3.5 (2.7)	5.9(3.4)	7.6(3.7)	8.0(3.7)
SGA n=117	3.0(2.8)	5.1(4.0)	6.8(4.8)	6.0(4.1)
p	0.09	0.045*	0.050*	<0.0001*

406 babies (58%) fall into this category making this the largest group with nearly a third (28%) forming the SGA subgroup. The mean bilirubin values were significantly different at 48, 72 and 120h.

Figure 6.17: Serum bilirubin of AGA and SGA subgroups in the 2000-2499g weight category



Phototherapy:

Phototherapy was started for nearly a third of all babies in both the groups. Mean bilirubin at start of phototherapy was around 11mg/dl in both the groups and average time of starting therapy was the third day of birth. About 65 hrs of therapy was needed in both the groups.

Table 6.18: Phototherapy in LBW infants:

Variable	AGA n=467	SGA n=233
Phototherapy	147(31.4%)	55(23.6%)
Mean bilirubin at start of photo-therapy(mg/dl)	11.34(3.1)	11.50(3.2)
Mean start time	62.3hrs(24.8)	68.9 hrs(28.12)
Mean duration of phototherapy	65.0(34.4)	64.0(42.8)

Double volume Exchange transfusion:

4 babies (2 AGA, 2 SGA) underwent exchange transfusion.

Significant hyperbilirubinemia:

Those babies undergoing exchange transfusion and having peak bilirubin 2mg within the exchange range were defined as having significant hyperbili-rubinemia.

22 babies (4.7%) in AGA group and 8(3.5%) in SGA group had significant hyperbilirubinemia. There was no statistical difference between the groups.

Follow up:

30 babies who had significant hyperbilirubinemia were followed up at 1month of corrected age and found to have normal neurological examination and behavioral audiometry.

Risk factors:

Table 6.19: Distribution of risk factors for jaundice

Variable	AGA= 467	SGA=233
ABO setting	101(21%)	53(22.7%)
Rh setting	14(3.0)	8(3.4%)
Polycythemia	2(0.4%)	1(0.4%)
Asphyxia	48(10.2%)	33(14.16%)
Sepsis	Possible*:13(2.7%) Probable*:32(6.8%) Confirmed: 7(1.4%)	1(0.4%) 6(2.6%) 2(0.9%)

*<0.05

Risk factors were equally distributed between the groups except the higher incidence of sepsis in AGA infants.

Risk factors and Jaundice requiring phototherapy:

Risk factors associated with significant jaundice in other studies in late pre-term and term babies were analyzed. .Lower birth weight, lower gestational age, induced delivery, perinatal asphyxia and sepsis were associated with development of jaundice requiring phototherapy. Male sex was not found to be associated significantly with significant jaundice

Table 6.20: Risk factors and requirement for phototherapy

Risk factors	Phototherapy n=202	No phototherapy N=498	p
Birth weight	1701(425)	2102(306)	0.001*
GA	33.4(3.01)	36.7(2.13)	0.001*
Males	90	237	0.452
Induced delivery	39	61	0.016*
Asphyxia	42	38	0.001*
Sepsis	42	18	0.001*

To summarize, there emerged a statistically significant difference in mean bilirubin levels at 48, 72 and 120 hours between AGA and SGA groups. Weight based assessment also showed similar trend in1500-1999 and 2000-2499g subgroups. This difference was not present between the AGA and SGA subgroups at each gestational age. This should be the effect of gestational age that is the only variable with a significant difference between these groups. To assess the effect of gestational age on correlation test was applied (GA vs. serum bilirubin)

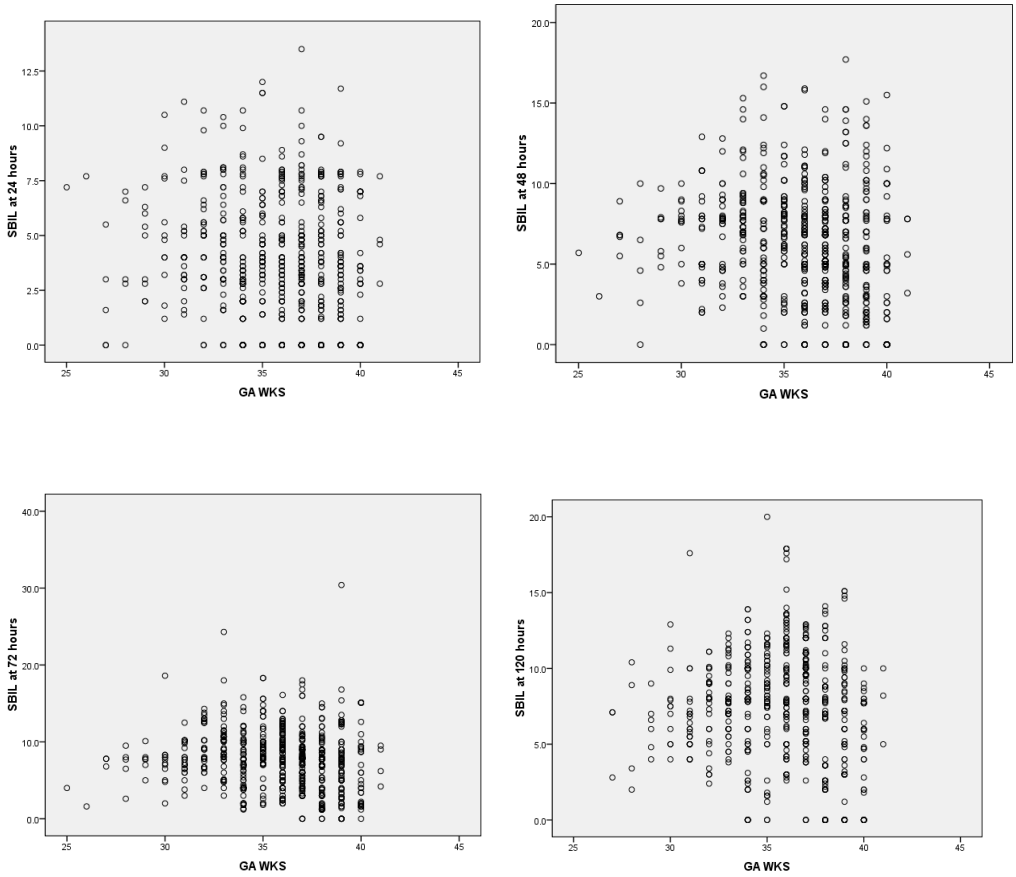
GA vs Serum Bilirubin correlation

Serum bilirubin was found to have negative correlation with gestational age fro 24 hrs up to 5 days.

Table 6.21.Correlations between GA and serum bilirubin at different time points for overall and AGA and SGA groups

		Over all	AGA	SGA
Serum bilirubin at 24 hours	Correlation	-0.171	-0.181	-0.084
	P-Value	0.001	0.001	0.205
	N	685	456	229
Serum bilirubin at 48hours	Correlation	-0.171	-0.159	-0.104
	P-Value	0.001	0.001	0.127
	N	666	448	218
Serum bilirubin at 72 hours	Correlation	-0.145	-0.120	-0.107
	P-Value	0.001	0.011	0.113
	N	671	451	220
Serum bilirubin at 120 hours	Correlation	-0.107	0.003	-0.164
	P-Value	0.008	0.954	0.020
	N	619	420	199

Figure 6.18:Correlation of serum bilirubin with GA



Serum bilirubin was found to negatively correlate with gestational age. Rate of change in serum bilirubin over 5 days was calculated and was not significantly different between AGA and SGA subgroups.

7. Discussion

28.4 % of infants born during the study period were low birth weight. The proportion of SGA infants was 33.2%. This is comparable with NNPD 2003 data for institutional deliveries (31.3% LBW, 31% of LBW SGA) [5].

Preterm LBW infants were 52% (370/700) vs. 48% (330/700) term low birth weight infants. The proportion of term LBW infants is higher than the NNPD data (48% vs 22%) but closely correlates with UNICEF report on low birth weight4. This has to be interpreted with caution as more than 50% of the low birth weight babies could not be recruited to the study due to early discharge from the hospital.

Significant number of mothers of SGA babies had anemia during pregnancy (22.3% vs.14.5%). 120 out of the total 700 mothers had anemia (Hb<10g/dL). Maternal anemia is known to influence birth weight and prematurity. Levy et al in a study in Israel found maternal anemia to be an independent risk factor for preterm delivery (OR = 1.2; 95% CI 1.1-1.2, p < 0.001) and low birthweight (OR = 1.1; 95% CI 1.1-1.2, p = 0.001).31.A meta analysis by Xiong also detected similar effect of maternal anemia on the birth weight and prematurity[32].

26.6 % SGA mothers had Pregnancy induced hypertension (PIH). It was 20.5% in AGA group. Preeclampsia increases the risk of intrauterine growth restriction and low birth weight. Xiong et al found the odds ratio of low birth weight was 2.65 (1.73-4.39) in PIH [33].

The distribution of term and preterm infants between the subgroups was skewed. Nearly three fourth (74%) of infants in the AGA group were <37 weeks gestation. Likewise two third of the infants in the SGA subgroup were more than 37 weeks. This was a major confounding factor while comparing AGA and SGA infants of different gestational ages.

Analysis of mean bilirubin levels between the AGA and SGA subgroups showed the levels to be significantly different at 48 hours, 72 hours and on day 5.The difference was not significant up to day 2. SGA group had consistently lower values than the AGA group.

Analysis of mean bilirubin at these four time points and comparison between AGA and SGA subgroups in gestational ages 31 weeks to 40 weeks showed that bilirubin values were comparable between these two groups at each gestational age. Rocha et al from Brazil while looking at the outcomes between AGA and SGA infants in 34 to 36 weeks GA had similar conclusion on neonatal jaundice[34].

We analyzed the results birth weight wise by categorizing the infants based on birth weight into groups of <1000g,1000-1499g.1500-1999g and 2000-2499g and compared the bilirubin at 4 time points between AGA and sub-groups in each of the weight categories. It was found that bilirubin values were significantly different between the subgroups at 48, 72 and on day 5 in the >1500g categories.

So, only when subgroups had infants from different gestation ages, were there detectable differences in mean bilirubin values. The AGA group had consistently higher values at each time points of bilirubin measurement. All these appeared to suggest that the differences were due to gestational age. So, we performed a correlation analysis between gestational ages and bilirubin levels at different time points. Gestational age had a significant negative correlation with mean bilirubin at all 4 time points. Birth weight and bilirubin did not show any correlation. This is consistent with higher and prolonged jaundice reported in preterm infants[23].

Phototherapy was warranted in 29% of LBW infants in the study. Higher number of AGA infants compared to SGA required phototherapy (31.4% vs 23.6%). The significant difference in the gestational age and sepsis, another risk factor for severe jaundice could explain the difference[11].Anil Narang et al reported 77.6% infants with birth weight < 1500 g required phototherapy

in their study[19]. 62 out of 88 VLBW infants (70%) in our study required phototherapy comparable to that observation. 59/229 (26%) late preterm infants in our study underwent phototherapy. 57% of late preterm infants required phototherapy in a study by Lavanya et al from Hyderabad. But this was the incidence of jaundice over the first 2 weeks of life and our study recorded jaundice only up to the fifth day of life.

Risk factors predicting significant jaundice and bilirubin toxicity have been proposed for late preterm and term infants[11].Another study looking for predictors of significant hyperbilirubinemia attributed higher bilirubin levels presence of OA setting, sibling jaundice and SGA [20]. Gestational age,sepsis, perinatal asphyxia and birth weight were found to be significantly associated with jaundice requiring phototherapy. Male gender was not a significant risk factor.

Only 4 LBW infants (0.6%) required exchange transfusion during the study period. This is consistent with the recent observations[18, 23, 24, 28]. With the advent of effective phototherapy delivery systems the need for exchange transfusions has virtually disappeared.

Those infants who had their peak bilirubin 2mg/dL within the exchange level and those who underwent exchange transfusions were followed up at 1

month corrected age with neurological examination and behavioural response audiometry like previously described and found to be normal. It has to be borne in mind that tonal abnormalities take longer to manifest and ABER is the best method to check sensorineural hearing loss though[21,22,23].

8 .Limitations of the study

The study aimed to recruit all low birth weight infants in the study period but could recruit only 50% due to early discharge and being missed to be recruited in a busy labor room.

The profile of AGA and SGA infants was different as more term babies were in the SGA group and more AGA babies were in the AGA group.

There were very few babies in <31 weeks gestational age.

The bilirubin estimation was done with spectrophotometer method designed to operate at higher bilirubin levels. This is an easy to use bed side method. Standard method of bilirubin estimation could not be used.

The babies did not have cord bilirubin to estimate the time trend in bilirubin rather than only comparing the time point estimation

9. Conclusions

- There is negative correlation between total serum bilirubin and gestational age from 24 hours to up to 5 days of birth.

- There is no correlation between birth weight and total serum bilirubin from 24 hrs up to 5 days of life. Lesser the gestational age higher was the peak serum bilirubin observed.

- The mean bilirubin and the rate of change in bilirubin were similar in both AGA and SGA subgroups for any given gestational age

- The intrauterine growth status does not seem to influence the bilirubin level or the rate of rise during the first 5 days of life

- Bilirubin level of intervention should be gestational age based rather than weight based in LBW infants

- Risk factors associated with significant hyperbilirubinemia in normal birth weight infants like gestational age, perinatal asphyxia, neonatal sepsis were associated with significant jaundice in LBW infants too.

S No	Sex	GA WKS	WT Grams	AGA/SGA	Maternal age	Consang	Parity	Maternal wt	maternal Ht	Anemia	Hypothyroidism	PIH	GDM	singleton/ Multiple
1	1	41	1705	2	21	1	1	45	146	1	1	1	1	1
2	2	33	1530	1	30	1	1	68	150	1	1	2	2	1
3	1	33	1715	1	20	1	1	45	153	1	1	1	1	1
4	2	37	1500	2	30	1	2	62	150	2	1	1	1	1
5	2	32	2050	1	27	2	2	55	154	1	1	1	1	1
6	2	35	1975	1	31	1	2	64	150	1	1	1	1	1
7	1	37	1965	2	22	1	1	65	153	1	1	1	1	1
8	1	36	1780	2	24	2	1	64	150	1	1	2	1	1
9	1	38	1765	2	25	1	1	67	162	1	1	1	1	1
10	1	36	2385	1	34	1	1	58	156	1	2	1	1	1
11	1	30	1570	1	33	1	2	68	168	1	1	1	2	1
12	2	36	1860	1	26	1	2	58	160	2	1	1	1	1
13	2	38	2120	2	24	1	2	59	148	1	1	1	1	1
14	1	38	2030	2	22	1	1	68	155	1	1	1	1	1
15	1	38	2450	1	22	2	2	68	155	1	1	1	1	1
16	2	38	2200	2	27	1	1	65	152	1	1	1	1	1
17	2	34	2100	1	31	1	1	66	158	1	2	2	1	1
18	1	36	2050	1	23	1	1	74	149	1	1	1	1	1
19	1	36	2170	1	28	1	1	43	160	1	1	1	1	1
20	2	38	2450	1	20	2	1	54	158	1	1	1	1	1
21	2	28	1170	1	29	1	1	75	158	1	1	2	1	1
22	2	33	1550	1	22	1	2	44	160	1	1	1	1	1
23	1	33	1670	1	23	2	2	61	160	1	1	2	1	1
24	1	28	1550	1	26	1	1	74	173	1	1	1	1	1
25	2	28	1050	1	30	2	2	52	150	1	1	1	1	1
26	1	35	1520	2	24	2	1	50	146	1	2	2	1	1
27	1	35	2200	1	24	2	1	50	146	1	2	2	1	1
28	2	36	1550	2	24	1	1	50	153	1	1	2	1	1
29	2	35	1225	2	30	1	1	55	142	1	1	1	2	1

30	2	34	1960	1	28	2	3	44	147	2	1	2	1	1
31	1	39	2400	1	25	1	1	48	150	2	1	2	1	1
32	2	37	2460	1	22	2	1	52	156	2	1	1	1	1
33	2	38	2350	1	28	2	2	55	155	1	1	1	1	1
34	1	39	2150	2	21	1	1	52	160	2	1	1	1	1
35	1	36	2100	1	28	2	3	52	160	2	1	1	1	1
36	2	38	2400	1	22	1	1	48	148	2	1	1	1	1
37	1	31	1875	1	21	1	1	56	156	1	1	1	1	1
38	1	39	2390	2	27	1	1	62	151	1	1	1	1	1
39	2	35	1745	1	29	1	2	52	152	1	1	1	1	1
40	1	38	2065	2	28	1	1	60	150	1	1	2	1	1
41	1	35	2000	1	25	1	1	60	156	1	1	1	1	1
42	2	37	2200	1	33	1	3	45	160	1	1	1	1	1
43	1	37	2430	1	26	1	2	50	152	1	1	1	1	1
44	2	36	2265	1	19	1	1	52	150	1	1	1	1	1
45	2	33	2320	1	22	2	2	43	143	1	1	1	1	1
46	2	38	2470	1	22	2	1	54	158	1	1	1	1	1
47	2	33	1605	1	24	1	1	57	148	1	1	1	1	1
48	1	37	2000	2	24	1	2	59	148	1	1	2	1	1
49	2	33	2010	1	30	1	1	50	148	1	1	1	1	1
50	1	34	2470	1	26	1	2	56	156	1	1	1	1	1
51	1	36	1990	1	28	1	2	58	154	1	1	1	1	1
52	1	34	1830	1	37	1	1	72	158	1	1	2	1	2
53	1	34	1400	1	37	1	1	72	158	1	1	2	1	2
54	1	40	2200	2	23	1	2	35	150	2	1	1	1	1
55	2	37	2100	2	32	1	3	56	155	1	2	1	1	1
56	1	35	2150	1	21	2	1	56	154	1	1	2	1	1
57	2	33	1950	1	25	1	2	58	158	1	1	1	1	2
58	2	33	1750	1	25	1	2	58	158	1	1	1	1	2
59	1	40	2365	2	27	1	1	53	143	1	1	1	1	1
60	1	36	1975	1	28	2	1	67	138	1	1	1	1	1
61	1	39	2450	1	28	1	3	70	153	2	1	1	1	1
62	1	36	2300	1	20	1	1	52	160	1	1	1	1	1

63	2	38	2250	1	24	2	3	54	148	1	1	1	1	1
64	2	37	1845	2	22	1	1	48	156	1	1	1	1	1
65	1	39	2400	1	24	2	1	50	154	1	1	2	1	1
66	2	37	2300	1	21	1	1	48	148	2	1	1	1	1
67	2	39	2450	1	23	1	1	52	155	1	1	1	1	1
68	1	36	2000	1	25	2	2	55	158	1	1	1	1	1
69	1	38	2250	1	24	1	1	52	156	1	1	1	1	1
70	2	39	2300	1	28	1	2	70	152	1	1	2	1	1
71	1	37	2010	1	24	2	2	56	160	1	1	1	1	2
72	2	40	2300	2	24	1	1	65	152	1	1	1	1	1
73	2	39	2300	2	24	1	3	43	148	1	1	1	1	1
74	1	33	1900	1	27	1	2	52	150	1	1	1	1	1
75	1	37	1600	2	27	2	1	56	156	1	1	1	1	1
76	2	37	2170	1	22	1	3	42	145	1	1	1	1	1
77	2	31	1530	1	27	1	3	51	155	1	1	1	1	2
78	2	31	1715	1	27	1	3	51	155	1	1	1	1	2
79	2	36	1600	2	21	1	1	45	150	2	1	1	1	1
80	1	39	2300	2	23	1	1	58	156	1	1	1	1	2
81	1	36	2415	1	25	2	1	50	155	1	1	1	1	1
82	1	39	2480	1	24	2	1	54	150	1	1	1	1	1
83	1	39	2400	1	22	1	2	42	148	1	1	1	1	1
84	1	30	1260	1	20	1	1	38	143	2	1	1	1	1
85	1	33	1970	1	22	1	2	52	150	2	1	1	1	1
86	1	39	2250	2	20	1	2	57	138	1	1	1	1	1
87	2	39	2200	2	23	1	3	47	151	1	1	1	1	1
88	2	36	1950	1	24	2	1	62	142	1	1	2	1	1
89	2	37	2100	1	25	1	1	42	146	1	1	1	1	1
90	2	39	2360	1	23	1	1	46	151	1	1	1	1	1
91	1	37	2360	1	20	1	1	48	152	1	1	1	1	1
92	2	39	2400	1	24	1	1	50	158	1	1	1	1	1
93	2	40	2300	2	25	1	2	56	152	1	1	1	1	1
94	1	35	2400	1	21	1	1	54	160	1	1	1	1	1
95	1	38	2150	2	24	2	1	53	156	1	1	1	1	1

96	2	38	2450	1	28	1	2	58	148	1	1	1	1	1
97	1	39	2490	1	26	1	3	60	162	1	1	1	1	1
98	2	40	2050	2	28	1	2	52	151	1	1	1	1	1
99	2	36	2300	1	25	1	1	54	149	1	1	1	1	1
100	1	36	2200	1	21	1	1	51	153	2	1	1	1	1
101	2	37	1340	2	24	1	1	52	147	1	1	1	1	2
102	2	37	1920	2	24	1	1	52	147	1	1	1	1	2
103	2	31	1275	1	22	2	1	56	150	1	1	2	1	1
104	2	34	1750	1	24	1	2	83	154	1	1	2	1	1
105	2	38	1970	2	26	1	1	60	148	1	1	2	1	1
106	1	34	2210	1	19	2	1	40	145	1	1	1	1	1
107	2	36	1790	2	30	1	3	60	154	1	1	2	1	1
108	2	33	1605	1	26	1	2	65	156	1	1	2	1	1
109	1	37	1900	2	19	1	1	50	144	1	1	1	1	1
110	1	32	1660	1	25	1	2	48	150	1	1	1	1	1
111	1	33	1560	1	30	2	3	60	148	2	1	1	1	1
112	2	31	1885	1	24	1	2	54	152	1	1	1	1	1
113	1	38	2100	2	19	1	1	60	152	1	1	2	1	1
114	2	39	1865	2	25	1	1	60	154	2	1	1	1	1
115	2	38	2470	1	19	2	1	52	146	2	1	1	1	1
116	2	39	2460	1	25	1	1	61	152	2	1	1	1	1
117	2	38	1815	2	26	1	1	56	151	1	1	1	1	1
118	1	35	1710	1	21	2	1	48	150	1	1	1	1	1
119	1	36	2230	1	25	1	1	60	154	1	1	2	1	1
120	1	37	2350	1	27	1	2	56	157	1	1	2	1	1
121	2	36	2000	1	28	1	2	50	153	1	1	1	1	1
122	2	37	2200	1	22	1	2	51	152	1	1	1	1	1
123	1	38	2400	1	23	1	2	50	156	1	1	1	1	1
124	2	40	2250	2	26	1	2	53	155	1	1	1	1	1
125	1	39	2450	1	22	1	1	49	158	1	1	1	1	1
126	1	38	2150	2	21	1	1	56	153	1	1	1	1	1
127	1	38	2240	1	24	1	1	54	152	1	1	2	1	1
128	1	37	2460	1	24	1	1	52	155	2	1	1	1	1

129	2	39	2350	1	26	1	2	60	148	1	1	1	1	1
130	2	37	2200	1	20	1	1	53	150	1	1	2	1	1
131	1	31	1090	2	22	1	2	45	148	1	1	1	2	1
132	2	34	1600	1	24	1	2	50	150	1	1	1	1	1
133	1	36	2050	1	27	1	1	58	150	1	1	1	1	1
134	1	35	1990	1	21	1	1	47	151	1	1	1	1	1
135	1	34	2110	1	32	1	2	63	162	1	2	1	1	1
136	1	33	2075	1	22	1	2	54	152	1	1	1	1	1
137	1	33	1815	1	24	1	2	52	154	1	1	1	1	1
138	2	36	1970	1	26	1	1	85	157	1	1	1	1	2
139	2	36	1890	1	26	1	1	85	157	1	1	1	1	1
140	1	37	2365	1	34	1	1	45	162	2	1	1	1	1
141	1	39	2200	2	20	1	1	60	150	1	1	1	1	1
142	2	38	2300	1	23	1	1	56	154	1	1	1	1	1
143	2	37	2250	1	35	1	2	55	152	1	1	1	1	1
144	1	35	2100	1	24	1	2	54	155	1	1	1	1	1
145	2	39	2300	2	22	2	1	45	145	1	1	2	1	1
146	1	38	2450	1	27	1	1	56	156	1	1	1	1	1
147	2	39	2450	1	22	1	1	45	137	1	1	1	1	1
148	1	38	1650	2	24	1	1	59	154	1	1	2	1	2
149	1	36	2150	1	28	1	1	45	153	2	1	1	1	1
150	1	37	2450	1	26	1	3	45	146	1	1	1	2	1
151	2	37	2455	1	25	2	2	44	149	1	1	1	1	1
152	2	37	2420	1	20	1	1	52	150	2	1	2	1	1
153	2	39	2135	2	27	1	2	50	140	2	1	1	1	2
154	2	39	2300	2	23	1	1	52	155	1	1	1	1	1
155	1	34	1980	1	20	1	1			1	1	1	1	1
156	1	36	1500	2	29	2	1			1	1	1	1	1
157	1	32	1390	1	28	1	3			2	1	1	1	1
158	2	40	2450	1	25	1	1	53	145	1	1	1	1	1
159	2	30	1540	1	20	1	2	48	148	1	1	1	1	1
160	2	36	1550	2	27	1	1	50	142	1	1	1	1	1
161	1	33	1260	1	22	1	1	70	157	1	1	1	1	1

162	2	34	1525	1	20	2	1	62	162	1	1	1	1	1
163	2	34	2220	1	33	1	1	59	142	1	1	2	1	1
164	2	34	1630	1	33	1	1	59	142	1	1	2	1	2
165	1	34	1690	1	24	1	1	55	154	1	1	1	1	2
166	1	34	1400	2	24	1	1	55	154	1	1	1	1	1
167	2	37	2160	1	38	1	1	55	150	1	1	2	1	1
168	1	38	2085	2	27	2	2			1	1	1	1	1
169	2	25	640	1	26	2	1	50	154	1	1	1	1	1
170	2	37	1615	2	21	1	1	47	140	2	1	1	1	2
171	2	37	2200	1	21	1	1	47	140	2	1	1	1	2
172	1	37	1980	2	25	1	2	43	155	1	1	1	1	1
173	2	32	1840	1	22	1	3	64	153	1	1	1	1	1
174	1	37	2190	1	22	1	2	63	157	1	1	1	1	1
175	2	28	915	1	20	2	1	52	147	2	1	2	1	1
176	2	36	1900	1	24	1	2	55	156	1	1	1	1	1
177	2	36	1635	2	23	1	1			1	1	1	1	1
178	1	35	1960	1	22	1	1	55	150	1	1	1	1	1
179	2	37	1525	2	21	2	3	45	148	2	1	1	1	1
180	1	35	2230	1	34	2	3	69	150	1	1	1	1	1
181	2	38	2400	1	24	1	1	55	152	1	1	1	1	1
182	2	38	2170	2	22	1	1	46	150	1	1	1	1	1
183	2	39	2300	2	25	1	1	53	152	1	1	1	1	1
184	1	37	2400	1	21	1	1	52	149	1	1	1	1	1
185	2	36	2350	1	26	1	2	60	158	1	1	2	1	1
186	1	37	2100	1	24	1	1	52	153	1	1	1	1	1
187	1	38	2350	1	21	2	1	51	155	2	1	1	1	1
188	1	39	2270	2	20	1	1	49	150	1	1	1	1	1
189	1	36	2250	1	27	1	1	55	155	2	1	2	1	1
190	2	37	2000	2	23	1	1	48	146	2	1	1	1	1
191	1	31	1725	1	20	1	1	57	155	1	1	1	1	1
192	1	37	1975	2	23	1	1	52	151	2	1	1	1	1
193	1	30	1880	1	22	1	1	46	160	1	1	1	1	1
194	2	34	1880	1	21	1	1	44	154	1	1	1	1	1

195	1	35	2115	1	27	1	1	47	152	1	1	1	1	1
196	2	39	2300	2	25	1	1			1	1	1	1	1
197	1	35	1340	2	28	2	3	45	158	1	1	1	1	1
198	1	40	2100	2	29	1	1	60	158	2	1	1	1	1
199	1	39	2145	2	25	1	1	35	143	1	1	1	1	1
200	2	35	1800	1	30	1	3	44	140	1	1	1	1	1
201	2	37	2290	1	22	1	1	47	146	1	1	1	1	1
202	1	37	2400	1	22	1	1	58	161	1	1	1	1	1
203	2	34	2230	1	23	1	1	46	155	1	1	1	1	1
204	2	36	2450	1	20	1	1			1	1	1	1	1
205	2	37	2300	1	23	1	1	73	155	1	1	1	1	2
206	1	37	2200	1	23	1	1	73	155	1	1	1	1	2
207	1	37	2300	1	36	1	2	60	160	1	1	2	1	1
208	1	36	2400	1	22	1	1	47	148	1	1	2	1	1
209	2	37	2000	2	22	2	1	56	150	1	1	2	1	1
210	1	34	2450	1	29	1	3	70	151	1	1	1	2	1
211	2	39	2400	2	23	1	1	63	160	1	1	1	1	1
212	1	37	2250	1	30	1	3	51	156	1	1	1	1	1
213	1	37	2250	1	25	1	1	53	147	1	1	1	1	1
214	1	38	2150	2	30	1	1	70	150	1	2	2	1	1
215	1	37	2200	1	25	1	1	53	153	1	1	2	1	1
216	1	38	2400	1	23	1	1	58	60	1	1	1	1	2
217	1	33	1200	2	22	1	1	65	165	2	1	2	1	1
218	1	33	1325	2	24	1	1	60	155	1	1	1	1	1
219	1	35	2335	1	23	2	1	42	144	1	1	1	1	1
220	2	35	2340	1	23	1	1	50	150	1	1	1	1	1
221	2	41	2330	2	26	1	3	44	160	2	2	2	2	1
222	1	37	2350	1	22	1	1	72	158	1	1	2	1	1
223	2	37	2100	1	20	2	1	44	148	1	1	1	1	1
224	1	39	2400	1	26	1	2	53	154	2	1	2	1	1
225	1	39	2300	2	22	1	1	58	150	1	1	1	1	1
226	1	35	2300	1	22	1	2	50	145	1	1	1	1	1
227	1	36	2430	1	24	1	1	83	155	1	1	1	1	1

228	1	36	2200	1	23	2	1	47	153	1	1	1	1	1
229	2	37	2485	1	26	1	1	60	158	1	1	1	1	1
230	2	38	2400	1	25	1	2	65	157	1	1	1	1	1
231	2	34	2450	1	25	1	1	74	157	1	1	1	1	1
232	2	35	2095	1	24	1	1	70	157	1	1	1	1	2
233	2	35	1910	1	24	1	1	70	157	1	1	1	1	1
234	2	39	1925	2	22	1	1	50	159	1	1	1	1	1
235	2	33	1560	1	30	1	2	48	146	2	1	1	1	1
236	1	38	1600	2	21	1	1	53	168	1	1	1	1	1
237	1	32	1305	2	25	1	2	60	153	2	2	2	1	1
238	2	32	1300	2	25	2	2	70	151	1	1	2	1	1
239	2	33	1125	2	22	1	1	45	162	1	1	1	1	1
240	1	32	1780	1	24	1	1	55	154	1	1	1	1	1
241	2	39	2225	2	20	1	1	49	159	1	1	1	1	1
242	2	39	2025	2	25	1	2	60	150	2	1	1	1	1
243	2	39	2225	2	20	1	1	49	159	1	1	1	1	1
244	1	35	2230	1	23	1	1			1	1	1	1	1
245	1	36	2400	1	27	2	2	72	150	1	2	1	2	1
246	1	38	2450	1	25	1	1	54	145	1	1	1	1	1
247	2	38	2350	1	27	1	2			1	1	2	1	1
248	2	38	2450	1	31	1	2	70	152	1	2	1	1	1
249	1	41	2400	2	27	1	2	70	152	1	1	1	1	1
250	2	39	2225	1	20	1	1	49	159	1	1	1	1	1
251	1	34	1690	1	24	1	1	55	154	1	1	1	1	2
252	1	34	1400	2	24	1	1	55	154	1	1	1	1	1
253	2	37	2160	1	38	1	1	55	150	1	1	2	1	1
254	1	38	2085	2	27	2	2			1	1	1	1	1
255	2	34	1870	1	26	2	1	50	154	1	1	1	1	1
256	2	37	1615	2	21	1	1	47	140	2	1	1	1	2
257	2	37	2200	1	21	1	1	47	140	2	1	1	1	2
258	1	37	2000	2	25	1	2	43	155	1	1	1	1	1
259	2	32	1840	1	22	1	3	64	153	1	1	1	1	1
260	1	37	2190	1	22	1	2	63	157	1	1	1	1	1

261	2	32	1310	1	20	2	1	52	147	2	1	2	1	1
262	2	36	1900	1	24	1	2	55	156	1	1	1	1	1
263	2	36	1635	2	23	1	1			1	1	1	1	1
264	1	35	1960	1	22	1	1	55	150	1	1	1	1	1
265	2	37	1525	2	21	2	3	45	148	2	1	1	1	1
266	1	35	2230	1	34	2	3	69	150	1	1	1	1	1
267	2	38	2400	1	24	1	1	55	152	1	1	1	1	1
268	2	38	2200	2	22	1	1	46	150	1	1	1	1	1
269	2	39	2300	1	25	1	1	53	152	1	1	1	1	1
270	1	37	2400	1	21	1	1	52	149	1	1	1	1	1
271	2	36	2350	1	26	1	2	60	158	1	1	2	1	1
272	1	37	2100	1	24	1	1	52	153	1	1	1	1	1
273	1	38	2350	1	21	2	1	51	155	2	1	1	1	1
274	1	39	2270	2	20	1	1	49	150	1	1	1	1	1
275	2	37	2450	1	28	1	1	50	146	1	2	1	1	1
276	2	41	2450	1	20	2	1	45	155	1	1	1	1	1
277	1	37	2350	1	19	1	1	48	150	1	1	1	1	1
278	2	38	2350	1	25	2	2	51	148	1	1	1	1	1
279	2	36	2300	1	18	2	1			2	1	1	1	1
280	2	35	1560	2	30	1	1	56	155	2	1	1	1	1
281	1	34	1240	2	22	2	1	44	150	1	1	1	1	1
282	2	31	1815	1	26	1	2	55	156	1	1	1	1	1
283	1	38	1640	2	25	1	1	48	148	1	1	2	1	1
284	1	40	1970	2	18	2	1	56	158	1	2	1	1	1
285	1	34	2300	1	25	1	2	48	149	1	1	1	1	1
286	1	34	1810	1	28	1	1	68	150	1	1	1	1	1
287	2	34	1400	2	26	1	1	50	162	1	1	1	1	1
288	2	34	2450	1	29	1	3			1	1	1	2	1
289	1	39	2165	2	24	2	2	80	158	2	1	2	1	1
290	2	39	2100	2	24	1	2	72	149	1	1	2	1	2
291	2	31	1275	1	22	2	1	56	150	1	1	2	1	1
292	2	34	1750	1	24	1	2	83	154	1	1	2	1	1
293	2	38	1970	2	26	1	1	60	148	1	1	2	1	1

294	1	34	2210	1	19	2	1	40	145	1	1	1	1	1
295	2	36	1790	2	30	1	3	60	154	1	1	2	1	1
296	2	33	1605	1	26	1	2	65	156	1	1	2	1	1
297	1	37	1900	2	19	1	1	50	144	1	1	1	1	1
298	1	32	1660	1	25	1	2	48	150	1	1	1	1	1
299	1	33	1560	1	30	2	3	60	148	2	1	1	1	1
300	2	31	1885	1	24	1	2	54	152	1	1	1	1	1
301	1	37	2250	1	30	1	2	80	149	1	1	1	1	1
302	2	37	1980	2	21	2	1			1	1	1	1	1
303	2	36	2120	1	34	1	1	57	156	2	1	1	1	1
304	2	34	1950	1	21	1	1	50	148	1	1	1	1	1
305	2	38	2400	1	26	2	1	55	154	1	1	1	1	1
306	2	38	2150	2	27		2			1	1	1	1	1
307	2	38	2300	1	20	1	2			1	1	1	1	1
308	1	38	2000	2	27	1	2			1	1	1	1	1
309	1	40	2250	2	26	1	1	53	150	2	1	1	1	1
310	1	38	2300	1	23	1	1			1	1	2	1	1
311	2	38	1885	2	25	1	1	58	152	1	1	1	1	1
312	2	36	1620	2	20	1	1	70	160	1	1	1	1	1
313	2	37	2265	1	27	2	1	55	146	1	1	1	1	1
314	1	39	1880	2	35	1	1	53	150	2	1	1	1	1
315	2	33	1630	1	34	1	1	48	150	1	1	1	1	1
316	2	35	1950	1	27	1	2	60	150	2	1	1	1	1
317	1	32	1900	1	20	1	2	43	147	1	1	1	1	1
318	2	34	2050	1	24	1	1	63	160	1	1	1	1	1
319	1	37	1845	2	31	2	3	66	156	2	1	1	1	1
320	2	36	1930	1	25	1	3			1	1	1	1	1
321	1	34	1640	1	34	1	2	56	149	1	1	2	1	1
322	1	36	2180	1	26	1	1	72	156	1	1	2	1	1
323	1	34	1830	1	19	2	1			1	1	1	1	1
324	1	37	2400	1	26	2	1	66	148	1	1	2	1	1
325	1	38	2100	2	38	1	3	68	154	1	1	2	1	1
326	1	33	2100	1	24	2	1	52	152	2	1	1	1	1

327	1	34	2220	1	24		1	70	148	1	1	2	1	1
328	1	39	2330	2	36	1	1	60	140	2	1	2	1	1
329	2	39	2250	2	39	2	2	57	143	1	1	1	1	1
330	2	39	2250	2	25	2	2	42	154	2	1	1	1	1
331	2	31	1005	2	31	1	2	59	148	1	1	2	1	1
332	1	39	2155	2	24	2	2	66	152	1	1	1	1	1
333	1	32	1705	1	24	1	1	89	155	1	1	1	2	1
334	2	36	1830	1	21	1	1	65	163	1	1	1	1	2
335	2	36	2200	1	21	1	1	65	163	1	1	1	1	2
336	2	33	1860	1	23	2	2			1	1	2	1	1
337	2	37	2255	1	30	1	2	53	164	1	1	1	1	1
338	2	36	2340	1	34	1	3	50	156	1	1	1	1	1
339	1	39	2400	1	25	1	1	62	150	1	2	1	1	1
340	2	37	2300	1	26	1	1	52	139	1	1	1	1	1
341	2	39	2030	2	24	2	1	52	143	1	1	1	1	1
342	2	35	2400	1	24	2	1	62	146	1	1	1	1	1
343	1	36	2200	1	23	2	1	47	153	1	1	1	1	1
344	2	37	2485	1	26	1	1	60	158	1	1	1	1	1
345	2	38	2400	1	25	1	2	65	157	1	1	1	1	1
346	2	34	2450	1	25	1	1	74	157	1	1	1	1	1
347	2	35	2095	1	25	1	1	58	148	1	1	1	1	1
348	2	35	1910	1	24	1	1	70	157	1	1	1	1	1
349	2	39	1925	2	22	1	1	50	159	1	1	1	1	1
350	2	33	1560	1	30	1	2	48	146	2	1	1	1	1
351	1	38	1600	2	21	1	1	53	168	1	1	1	1	1
352	1	32	1305	1	25	1	2	60	153	2	2	2	1	1
353	2	32	1390	1	25	2	2	70	151	1	1	2	1	1
354	2	33	1125	2	22	1	1	45	162	1	1	1	1	1
355	1	32	1780	1	24	1	1	55	154	1	1	1	1	1
356	2	39	2025	2	25	1	2	60	150	2	1	1	1	1
357	1	35	2230	1	23	1	1	55	148	1	1	1	1	1
358	1	36	2480	1	21	1	1	40	158	2	1	1	1	1
359	2	34	2210	1	23	2	1	47	157	1	1	1	1	1

360	2	37	2300	1	26	1	1	58	160	1	1	1	2	1
361	2	32	1875	1	26	1	1	74	149	1	1	1	1	2
362	2	39	1630	2	21	1	3	56	151	1	1	1	1	1
363	2	39	2160	2	20	1	1	68	155	2	2	2	1	2
364	1	34	1680	1	22	1	1	45	138	2	1	1	1	1
365	2	34	1740	1	30	1	2			1	1	1	1	1
366	2	33	1185	2	28	1	1	66	138	1	1	1	1	1
367	2	32	1400	1	24	1	1	56	145	1	1	1	1	1
368	1	37	1440	2	20	2	1	45	146	1	1	1	1	1
369	2	36	1255	2	22	1	1	57	156	1	1	2	1	1
370	1	36	1875	1	24	1	1	57	162	1	1	2	1	3
371	1	36	1690	2	24	1	1	57	162	1	1	2	1	3
372	2	36	1440	2	24	1	1	57	162	1	1	2	1	3
373	1	34	1840	1	31	1	3	75	158	1	1	1	1	1
374	2	30	1415	1	25	1	1	70	148	1	1	2	1	1
375	2	32	1200	1	26	1	1	74	149	1	1	1	1	2
376	2	39	2295	2	37	1	3	50	145	2	1	1	1	1
377	1	33	1560	2	19	1	1	55	145	1	1	2	1	1
378	1	31	880	2	23	1	2	66	148	1	1	2	1	1
379	2	38	2350	1	29	1	3	61	139	1	1	1	1	1
380	2	35	2200	1	22	1	2	45	155	1	1	1	1	1
381	1	38	2150	2	22	2	1	46	145	1	1	1	1	1
382	1	39	1945	2	24	1	3	42	151	1	1	1	1	1
383	2	32	1900	1	26	1	2	43	147	1	1	1	1	1
384	2	38	2190	2	20	1	1	48	148	1	2	1	1	1
385	2	36	2365	1	23	1	2	53	145	1	1	1	1	1
386	1	40	2480	1	25	1	2	60	162	1	1	1	1	1
387	1	37	2300	1	21	1	2			1	1	1	1	1
388	2	37	2100	1	23	2	1	56	152	1	1	1	1	1
389	1	35	1730	1	25	1	2	58	146	2	1	2	1	1
390	2	32	1200	1	35	1	1			2	1	2	1	2
391	2	29	855	1	23	1	1	55	154	1	2	2	1	1
392	1	33	2005	1	39	1	3	80	148	1	1	1	2	1

393	1	32	2030	1	18	1	1	60	152	2	1	1	1	1
394	2	32	1005	2	35	1	1			2	1	2	1	2
395	1	29	835	1	21	1	1	62	138	1	1	1	1	1
396	1	29	1345	1	26	1	1	62	156	1	1	1	1	1
397	1	34	1720	1	25	2	3	50	148	1	1	1	1	1
398	1	35	1730	1	25	1	2	58	146	2	1	2	1	1
399	2	35	1575	2	19	1	1	47	152	1	1	2	1	1
400	2	35	2225	1	22	1	2	69	156	2	1	2	1	3
401	2	35	1830	1	22	1	2	69	156	2	1	2	1	3
402	2	34	1480	1	33	1	1	70	150	1	1	2	1	2
403	2	34	1340	2	33	1	1	70	150	1	1	2	1	2
404	1	37	2250	1	30	1	2	80	149	1	1	1	1	1
405	2	37	1980	2	21	2	1			1	1	1	1	1
406	2	36	2120	1	34	1	1	57	156	2	1	1	1	1
407	2	34	1950	1	21	1	1	50	148	1	1	1	1	1
408	2	38	2400	1	26	2	1	55	154	1	1	1	1	1
409	2	38	2250	1	27		2			1	1	1	1	1
410	1	34	1680	1	22	1	1	45	138	2	1	1	1	1
411	2	34	1740	1	30	1	2			1	1	1	1	1
412	2	33	1185	2	28	1	1	66	138	1	1	1	1	1
413	2	32	1400	1	24	1	1	56	145	1	1	1	1	1
414	1	37	1440	2	20	2	1	45	146	1	1	1	1	1
415	2	36	1255	2	22	1	1	57	156	1	1	2	1	1
416	2	36	2340	1	34	1	3	50	156	1	1	1	1	1
417	1	39	2400	1	25	1	1	62	150	1	2	1	1	1
418	2	37	2300	1	26	1	1	52	139	1	1	1	1	1
419	2	39	2030	2	24	2	1	52	143	1	1	1	1	1
420	2	35	2400	1	24	2	1	62	146	1	1	1	1	1
421	1	32	1800	1	18	1	1	60	152	2	1	1	1	1
422	2	36	2315	1	33	1	1	55	153	1	1	2	1	1
423	1	34	2135	1	19	1	1			1	1	1	1	1
424	1	34	2120	1	19	1	1			1	1	1	1	1
425	2	37	2160	1	24	1	1	70	155	1	1	2	1	1

426	1	33	1815	1	24	1	1	74	165	1	1	1	1	1
427	1	38	2470	1	18	1	1	53	163	2	1	1	1	1
428	2	33	1300	2	23	1	1	75	162	1	1	2	1	1
429	2	36	2115	1	22	2	1	50	144	1	1	1	1	1
430	2	35	2050	1	22	1	1			1	1	2	1	1
431	1	40	2195	2	24	2	1	60	156	1	1	1	1	1
432	2	39	2200	2	24	1	1			2	1	1	1	1
433	2	38	2200	1	20	1	1	50	148	1	1	2	1	1
434	1	34	2440	1	28	1	1	45	144	1	1	1	1	1
435	1	37	2110	1	22	1	2	75	150	1	1	1	1	1
436	1	37	2310	1	22	1	1	48	150	1	1	1	1	1
437	1	40	2330	2	21	1	1	50	150	1	1	1	1	1
438	2	37	2300	1	18	1	1	42	145	1	1	1	1	1
439	2	31	1390	1	20	1	1	45	149	1	1	1	1	1
440	2	36	1985	1	22	1	1	55	156	1	1	1	1	1
441	1	34	1660	1	30	1	3	54	148	1	1	1	1	1
442	2	33	1485	1	20	1	1			1	1	2	1	2
443	1	33	1800	1	20	1	1			1	1	2	1	2
444	2	39	2320	2	28	1	3	55	155	1	1	1	1	1
445	2	40	2390	2	25	1	2	79	170	2	1	1	1	1
446	2	37	2475	1	26	1	2	60	142	1	1	1	1	1
447	2	35	1955	1	21	1	2	55	157	1	1	1	1	1
448	2	35	2130	1	21	1	2	55	157	1	1	1	1	1
449	2	40	2350	2	32	1	3	62	154	2	1	1	1	1
450	2	38	2260	1	22	1	1	55	156	1	1	1	1	1
451	2	37	2310	1	18	1	1	50	152	1	1	1	1	1
452	1	35	2300	1	22	1	1	50	152	1	1	1	1	1
453	2	29	1235	1	30	1	3	46	144	2	1	1	1	1
454	2	29	1550	1	19	1	2	48	156	1	1	1	1	1
455	2	33	1330	2	23	1	2	63	150	1	1	1	1	1
456	2	31	1155	2	24	1	1	58	156	1	1	1	1	1
457	2	35	2345	1	26	2	1	63	148	1	1	1	1	1
458	2	38	2195	2	19	1	1	55	160	1	1	1	1	1

459	2	35	2335	1	22	1	2	51	152	1	1	1	1	1
460	2	38	1895	2	23	1	2	50	152	1	1	1	1	1
461	2	33	1860	1	22	1	1	75	158	1	1	1	1	1
462	2	30	1785	1	23	1	3			1	1	1	1	1
463	2	36	1540	2	27	1	1	58	156	1	1	2	1	1
464	2	37	2150	1	23	2	3	54	152	1	1	1	1	1
465	1	39	2490	1	20	1	1	46	153	1	1	1	1	1
466	1	34	1830	1	28	1	1	90	164	1	1	2	1	1
467	1	30	1460	1	29	1	2	82	152	1	1	2	1	1
468	1	39	1700	2	22	2	1	55	150	1	1	1	1	1
469	2	34	1845	1	20	1	2	76	153	2	1	1	1	1
470	1	36	2020	1	27	1	1	50	148	1	1	1	1	1
471	1	36	2140	1	27	1	1	58	156	1	1	2	1	1
472	1	39	2265	2	25	1	2	50	155	1	1	1	1	1
473	1	36	2330	1	22	1	1	49	150	2	1	1	1	1
474	2	36	1505	2	24	1	1	55	146	1	1	2	1	1
475	2	36	1645	2	18	1	1	41	144	2	1	1	1	1
476	2	40	2450	1	20	1	1	60	138	1	1	2	1	1
477	1	35	2195	1	23	1	1	44	145	1	1	1	1	1
478	2	37	2295	1	21	1	1	47	151	2	1	1	1	1
479	1	37	2310	1	25	1	1	64	157	1	1	1	1	1
480	2	38	2180	2	21	1	1	50	145	1	1	1	1	1
481	1	37	1990	2	33	1	2	48	138	2	1	1	1	1
482	2	39	2192	2	32	1	2	55	150	2	1	1	1	1
483	2	38	2160	2	26	1	1	74	154	1	1	1	1	1
484	2	34	1980	1	30	1	3	49	147	1	1	1	1	1
485	2	35	2250	2	24	1	1	65	146	1	1	1	1	1
486	1	39	2260	2	21	1	2	63	164	1	1	2	1	1
487	1	38	2450	1	21	1	1	55	159	1	1	1	1	1
488	1	38	2180	2	22	1	1	48	155	1	1	1	1	1
489	1	38	2450	1	23	1	1	74	155	1	1	1	1	1
490	1	35	1755	1	21	1	1			1	1	2	1	1
491	2	32	1745	1	18	1	1	46	158	1	1	1	1	1

492	2	40	2395	2	24	1	1	59	148	1	1	1	1	1
493	1	38	2345	1	19	1	1	50	145	1	1	1	1	1
494	2	38	2200	2	23	1	2	45	156	2	1	1	1	1
495	1	37	2400	1	29	1	1	45	150	2	1	1	1	1
496	1	38	2110	2	21	2	2	57	158	1	1	1	1	1
497	2	39	2340	2	25	1	1	46	148	1	1	1	1	1
498	2	35	2150	1	24	1	1	86	153	1	1	2	1	1
499	2	37	2485	1	22	2	1	55	152	1	1	1	1	1
500	2	33	2360	1	23	2	1	56	154	1	1	2	1	1
501	1	26	925	1	21	2	1	45	148	1	1	2	1	1
502	1	34	2120	1	19	1	1			1	1	1	1	1
503	2	37	2160	1	24	1	1	70	155	1	1	2	1	1
504	1	33	1815	1	24	1	1	74	165	1	1	1	1	1
505	1	38	2470	1	18	1	1	53	163	2	1	1	1	1
506	2	33	1300	2	23	1	1	75	162	1	1	2	1	1
507	2	36	2115	1	22	2	1	50	144	1	1	1	1	1
508	2	35	2050	1	22	1	1			1	1	2	1	1
509	1	40	2195	2	24	2	1	60	156	1	1	1	1	1
510	2	39	2300	1	24	1	1			2	1	1	1	1
511	2	38	2200	1	20	1	1	50	148	1	1	2	1	1
512	1	34	2440	1	28	1	1	45	144	1	1	1	1	1
513	1	37	2110	1	22	1	2	75	150	1	1	1	1	1
514	1	37	2310	1	22	1	1	48	150	1	1	1	1	1
515	1	40	2330	2	21	1	1	50	150	1	1	1	1	1
516	2	37	2300	1	18	1	1	42	145	1	1	1	1	1
517	2	31	1390	1	20	1	1	45	149	1	1	1	1	1
518	2	36	1985	1	22	1	1	55	156	1	1	1	1	1
519	1	34	1660	1	30	1	3	54	148	1	1	1	1	1
520	2	40	2390	2	25	1	2	79	170	2	1	1	1	1
521	2	37	2475	1	26	1	2	60	142	1	1	1	1	1
522	2	36	1645	2	18	1	1	41	144	2	1	1	1	1
523	2	40	2450	1	20	1	1	60	138	1	1	2	1	1
524	1	35	2195	1	23	1	1	44	145	1	1	1	1	1

525	2	37	2295	1	21	1	1	47	151	2	1	1	1	1
526	1	37	2310	1	25	1	1	64	157	1	1	1	1	1
527	2	38	2180	2	21	1	1	50	145	1	1	1	1	1
528	1	37	1990	2	33	1	2	48	138	2	1	1	1	1
529	2	39	2192	2	32	1	2	55	150	2	1	1	1	1
530	2	38	2160	2	26	1	1	74	154	1	1	1	1	1
531	2	34	1980	1	30	1	3	49	147	1	1	1	1	1
532	2	35	2250	2	24	1	1	65	146	1	1	1	1	1
533	1	39	2260	2	21	1	2	63	164	1	1	2	1	1
534	1	38	2450	1	21	1	1	55	159	1	1	1	1	1
535	1	38	2180	2	22	1	1	48	155	1	1	1	1	1
536	1	38	2450	1	23	1	1	74	155	1	1	1	1	1
537	1	35	1755	1	21	1	1			1	1	2	1	1
538	2	32	1745	1	18	1	1	46	158	1	1	1	1	1
539	2	39	2320	2	28	1	3	55	155	1	1	1	1	1
540	2	40	2390	2	25	1	2	79	170	2	1	1	1	1
541	1	38	1900	2	30	1	1	45	150	2	1	2	1	1
542	1	36	2150	1	32	1	1	77	158	1	1	2	1	1
543	1	36	2000	1	35	1	1	40	142	2	1	1	1	1
544	2	36	2440	1	25	1	2	56	150	1	1	1	1	2
545	2	36	2475	1	25	1	2	56	150	1	1	1	1	2
546	2	40	2465	1	25	1	1	64	160	1	1	1	1	1
547	1	37	2295	1	24	1	1	48	149	1	1	1	1	1
548	1	37	2290	1	27	1	3	40	145	1	1	1	1	1
549	2	32	1400	1	31	1	1	52	149	1	1	2	1	1
550	1	40	2400	2	22	1	1	75	153	1	1	2	1	1
551	2	40	2275	2	19	1	1	44	144	1	1	1	1	1
552	2	40	2350	2	23	1	1	56	150	1	1	1	1	1
553	1	35	1965	1	24	1	2	61	153	1	1	1	1	1
554	1	30	1435	1	20	1	1	60	155	1	1	1	1	1
555	2	27	1000	1	22	1	1	50	155	1	1	1	1	1
556	1	36	2395	1	22	1	2	55	152	1	1	1	1	1
557	2	33	1840	1	25	2	1	66	155	1	1	2	1	1

558	2	36	2050	1	23	1	2	45	140	1	1	1	1	1
559	2	36	2045	1	23	1	2	45	140	1	1	1	1	1
560	2	37	1750	2	24	1	2	80	150	1	1	1	1	1
561	1	37	2340	1	38	1	2	81	156	1	1	1	1	1
562	2	31	1605	1	37	2	2	60	154	1	1	1	1	1
563	2	33	1525	1	21	2	2	50	146	1	1	1	1	1
564	1	37	2040	1	29	1	1	65	150	1	1	1	1	1
565	1	31	1035	2	28	1	2	84	157	1	1	2	1	1
566	2	34	1530	2	23	1	1	70	158	1	1	2	1	1
567	1	37	2180	1	31	1	2	45	155	1	1	1	1	1
568	2	36	1480	2	22	2	2	60	146	2	1	2	1	1
569	1	39	2470	1	22	1	1	76	165	1	1	2	1	1
570	2	31	1650	1	23	1	1	53	152	2	1	1	1	1
571	2	34	1530	2	23	2	1	70	158	1	1	2	1	1
572	1	34	1985	1	26	1	1	47	158	1	1	1	1	1
573	2	37	1615	2	32	1	3			1	1	1	1	1
574	1	31	1200	2	24	1	1	55	140	1	1	1	1	1
575	2	37	1945	2	22	2	2	60	155	1	1	2	1	1
576	2	32	1590	1	27	1	2	65	156	1	1	1	1	1
577	2	39	2192	2	32	1	2	55	150	2	1	1	1	1
578	2	38	2160	2	26	1	1	74	154	1	1	1	1	1
579	2	34	1980	1	30	1	3	49	147	1	1	1	1	1
580	2	35	2250	2	24	1	1	65	146	1	1	1	1	1
581	1	39	2260	2	21	1	2	63	164	1	1	2	1	1
582	1	38	2450	1	21	1	1	55	159	1	1	1	1	1
583	1	38	2180	2	22	1	1	48	155	1	1	1	1	1
584	1	38	2450	1	23	1	1	74	155	1	1	1	1	1
585	1	35	1755	1	21	1	1			1	1	2	1	1
586	2	32	1745	1	18	1	1	46	158	1	1	1	1	1
587	2	39	2320	2	28	1	3	55	155	1	1	1	1	1
588	2	40	2390	2	25	1	2	79	170	2	1	1	1	1
589	1	38	1900	2	30	1	1	45	150	2	1	2	1	1
590	1	36	2150	1	32	1	1	77	158	1	1	2	1	1

591	1	36	2000	1	35	1	1	40	142	2	1	1	1	1
592	2	37	2160	1	24	1	1	70	155	1	1	2	1	1
593	1	33	1815	1	24	1	1	74	165	1	1	1	1	1
594	1	38	2470	1	18	1	1	53	163	2	1	1	1	1
595	2	33	1300	2	23	1	1	75	162	1	1	2	1	1
596	2	36	2115	1	22	2	1	50	144	1	1	1	1	1
597	2	35	2050	1	22	1	1			1	1	2	1	1
598	1	40	2195	2	24	2	1	60	156	1	1	1	1	1
599	2	39	2300	1	24	1	1			2	1	1	1	1
600	2	38	2200	1	20	1	1	50	148	1	1	2	1	1
601	1	34	2440	1	28	1	1	45	144	1	1	1	1	1
602	1	37	2110	1	22	1	2	75	150	1	1	1	1	1
603	1	40	2400	2	22	1	1	75	153	1	1	2	1	1
604	2	40	2275	2	19	1	1	44	144	1	1	1	1	1
605	2	40	2350	2	23	1	1	56	150	1	1	1	1	1
606	1	35	1965	1	24	1	2	61	153	1	1	1	1	1
607	1	30	1435	1	20	1	1	60	155	1	1	1	1	1
608	2	27	1000	1	22	1	1	50	155	1	1	1	1	1
609	1	36	2395	1	22	1	2	55	152	1	1	1	1	1
610	2	33	1840	1	25	2	1	66	155	1	1	2	1	1
611	2	36	2115	1	22	2	1	50	144	1	1	1	1	1
612	2	35	2050	1	22	1	1			1	1	2	1	1
613	1	40	2195	2	24	2	1	60	156	1	1	1	1	1
614	2	39	2300	1	24	1	1			2	1	1	1	1
615	2	38	2180	2	20	1	1	50	148	1	1	2	1	1
616	1	34	2440	1	28	1	1	45	144	1	1	1	1	1
617	1	37	2110	1	22	1	2	75	150	1	1	1	1	1
618	1	37	2310	1	22	1	1	48	150	1	1	1	1	1
619	1	40	2330	2	21	1	1	50	150	1	1	1	1	1
620	2	37	2300	1	18	1	1	42	145	1	1	1	1	1
621	2	31	1390	1	20	1	1	45	149	1	1	1	1	1
622	2	36	1985	1	22	1	1	55	156	1	1	1	1	1
623	1	34	1660	1	30	1	3	54	148	1	1	1	1	1

624	2	40	2390	2	25	1	2	79	170	2	1	1	1	1
625	1	33	1560	1	19	1	1	55	145	1	1	2	1	1
626	1	31	880	2	23	1	2	66	148	1	1	2	1	1
627	2	38	2350	1	29	1	3	61	139	1	1	1	1	1
628	2	35	2200	1	22	1	2	45	155	1	1	1	1	1
629	1	38	2150	2	22	2	1	46	145	1	1	1	1	1
630	1	39	1945	2	24	1	3	42	151	1	1	1	1	1
631	2	32	1900	1	26	1	2	43	147	1	1	1	1	1
632	2	38	2190	2	20	1	1	48	148	1	2	1	1	1
633	2	36	2365	1	23	1	2	53	145	1	1	1	1	1
634	1	40	2480	1	25	1	2	60	162	1	1	1	1	1
635	1	37	2300	1	21	1	2			1	1	1	1	1
636	2	37	2100	1	23	2	1	56	152	1	1	1	1	1
637	2	32	1870	1	21	2	1	56	155	1	1	1	1	1
638	1	34	2115	1	25	1	3	54	153	1	1	1	1	1
639	1	35	1830	1	26	1	1	60	144	1	1	1	1	1
640	1	36	1840	1	26	1	1			1	1	1	1	1
641	2	33	2000	1	34	2	1	72	151	1	2	1	1	1
642	2	36	2365	1	30	1	1	58	160	1	1	1	1	1
643	1	36	2305	1	28	1	1	56	155	1	1	2	1	1
644	1	36	2430	1	28	1	1	56	155	1	1	2	1	1
645	2	40	2285	2	20	1	1			1	1	1	1	1
646	1	40	2325	2	37	1	2	54	148	1	1	1	1	1
647	1	38	1995	2	21	1	1	45	155	1	1	1	1	1
648	1	40	1690	2	29	1	2	62	166	1	1	1	1	1
649	2	32	1200	2	26	1	1			1	1	1	1	1
650	2	32	1415	1	26	1	1			1	1	1	1	1
651	2	35	2475	1	25	1	1	55	158	1	1	1	1	1
652	2	31	1200	2	19	1	1	49	155	1	1	2	1	1
653	1	29	1145	1	21	1	1	55	165	1	1	1	1	1
654	1	29	1200	1	21	1	1	55	165	1	1	1	1	1
655	2	32	1985	1	26	1	1	164	62	1	1	2	1	1
656	1	33	1115	2	20	1	1	42	140	2	1	2	1	1

657	2	35	1840	1	29	1	2	55	154	1	1	2	1	1
658	1	35	1290	2	23	1	2			1	1	1	1	1
659	2	29	1665	1	31	1	2			1	1	1	1	1
660	1	30	1320	1	18	2	1			2	1	1	1	1
661	2	33	1100	2	26	1	1			1	1	2	1	1
662	1	31	1520	1	23	1	1			1	1	1	1	1
663	2	33	1635	1	19	1	1			1	1	2	1	1
664	2	36	1750	2	28	1	2	44	148	2	1	1	1	1
665	1	33	2000	2	20	1	1	42	140	2	1	2	1	1
666	2	39	2405	1	29	1	1	53	150	2	1	1	1	1
667	2	40	1715	2	24	1	1	66	154	2	1	1	1	1
668	1	35	1815	1	24	1	1	47	148	2	1	1	1	1
669	1	37	2000	2	20	1	1	50	150	1	1	1	1	1
670	2	36	2050	1	26	1	1	62	141	1	1	1	1	2
671	2	36	1890	1	26	1	1	62	141	1	1	1	1	2
672	1	34	1890	1	23	1	1	45	150	2	1	1	1	1
673	2	34	2150	1	22	1	1	56	144	1	1	1	1	1
674	1	27	900	1	32	2	1	67	152	1	1	1	2	1
675	1	31	1200	2			1			1	1	2	1	1
676	1	35	1295	2	22	1	1			1	1	1	1	1
677	1	35	1615	2	25	2	1			1	1	1	1	1
678	1	39	1985	2	39	1	1	60	154	1	1	1	1	1
679	1	39	2350	2	24	1	2	44	154	2	1	1	1	1
680	1	37	2450	1	26	1	1	58	154	1	1	1	1	1
681	1	36	1900	1	26	1	2	58	146	1	1	1	1	1
682	2	34	1530	2	23	1	1	70	158	1	1	2	1	1
683	1	37	2180	1	31	1	2	45	155	1	1	1	1	1
684	2	36	1480	2	22	2	2	60	146	2	1	2	1	1
685	1	39	2470	1	22	1	1	76	165	1	1	2	1	1
686	2	31	1650	1	23	1	1	53	152	2	1	1	1	1
687	2	34	1530	2	23	2	1	70	158	1	1	2	1	1
688	2	28	1100	1	19	1	1			2	1	2	1	1
689	1	33	1520	1	20	1	1			2	1	1	1	1

690	1	35	2100	1	30	1	2	43	153	1	1	2	1	1
691	1	33	700	2	22	1	1	62	156	1	1	2	1	1
692	1	36	2250	1	26	1	3			1	1	2	1	1
693	1	37	1900	2	33	1	2			1	1	1	1	1
694	1	30	1205	1	29	1	2			1	1	1	1	1
695	1	30	1370	1	29	1	2			1	1	1	1	1
696	1	35	1765	1	26	1	1			1	1	1	1	1
697	2	29	1215	1	29	1	2			1	1	1	1	1
698	2	27	1010	1	25	1	2			1	1	1	1	1
699	2	33	1630	1	21	1	3	52	150	1	1	1	1	1
700	1	27	845	1	21	1	2			1	1	1	1	1

type of multiple	BG	MOD	Induction	Apgar 1 min	5min	Resuscitation	Asphyxia	Admission	Sepsis	Respiratory support	Feed	Time on IVF	Time to full feeds
	2	5		5	8	3	2	2	1	2	3	72	7
	1	5		7	8		1	2	1	1	1		4
	2	1		7	8	1	1	2	1	1	1		4
	1	5		7	8	1	1	2	1	1	1		4
	1	1		7	8	1	1	2	1	3	3	48	5
	0	5		8	9	1	1	2	1	1	1		4
	0	5		7	8	1	1	2	1	1	1		1
	2	5		7	8	1	1	2	1	1	1		1
	4	5		7	8	1	1	2	1	1	1		1
	1	5		7	8	1	1	3	1	3	3	72	5
	2	3		7	8	1	1	2	1	3	3	96	7
	2	1		7	8	1	1	2	1	1	1		1
	2	4		8	9	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	0	1		8	9	1	1	1	1	1	1		1
	2	1		7	8	1	1	1	1	1	1		1
	2	1		7	8	1	1	1	1	1	1		1
	0	2	3	7	8	1	1	1	1	1	1		1
	1	1		8	9	1	1	1	1	1	1		1
	0	1		7	8	2	1	3	3	3	3	144	10
	0	1		6	7	2	1	3	1	4	3	120	5
	3	5		6	8	3	2	3	3	3	3	168	10
	0	5		6	7	1	1	3	3	4	3	192	14
	1	5		6	7	3	2	2	1	1	3	96	8
	1	5		7	8	1	1	2	1	1	1		1
	1	5		8	9	1	1	1	1	1	1		1
	0	5		7	8	1	1	2	1	1	1		1
	0	5		7	8	1	1	2	1	1	3	72	6

	4	5		7	8	1	1	2	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	1	1		8	9	1	1	1	1	1	1		1
	0	1		8	9	1	1	1	1	1	1		1
	1	1		7	8	1	1	1	1	1	1		1
	0	1		8	9	1	1	1	1	1	1		1
	0	1		3	7	3	2	6	3	3	3	120	8
	2	5		8	9	1	1	5	1	3	3	24	1
	2	1		8	9	1	1	2	1	1	1		1
	2	1		7	8	1	1	1	1	1	1		1
	2	2	1	7	8		1	2	1	1	1		1
	3	2	2	7	8	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	1	1		7	8	1	1	1	1	1	1		1
	1	3		7	9	1	1	1	1	1	1		1
	0	1		8	9	1	1	1	1	1	1		1
	0	1		7	8	1	1	1	1	1	1		1
	0	5		7	8	1	1	1	1	1	1		1
	0	1		8	9	1	1	1	1	1	1		1
	0	1		7	8	1	1	1	1	1	1		1
	5	1		8	9	1	1	2	1	1	1		1
2	0	5		8	9	1	1	2	1	1	1		1
2	0	5		7	8	1	1	2	1	1	1		1
	1	1		7	8	1	1	1	1	1	1		1
	2	5		8	9	1	1	1	1	1	1		1
	0	5		7	9	1	1	1	1	1	1		1
2	0	5		7	8	1	1	1	1	1	1		1
2	0	5		7	9	1	1	1	1	1	1		1
	4	5		7	8	1	1	1	1	1	1		1
	2	5		7	9	1	1	1	1	1	1		1
	4	5		8	9	1	1	1	1	1	1		1
	0	5		7	8	1	1	1	1	1	1		1

	2	5		7	8	1	1	1	1	1	1	1
	1	1		8	9	1	1	1	1	1	1	1
	1	1		7	8	1	1	1	1	1	1	1
	0	1		7	8	1	1	1	1	1	1	1
	1	1		7	8	1	1	1	1	1	1	1
	1	1		7	9	1	1	1	1	1	1	1
	2	1		7	8	1	1	1	1	1	1	1
	0	1		8	9	3	1	1	1	1	1	1
1	2	6		8	9	1	1	1	1	1	1	1
	1	5		7	8	1	1	1	1	1	1	1
	0	5		8	9	1	1	1	1	1	1	1
	1	1		7	8	1	1	2		1	1	1
	2	1		6	7	3	2	6	3	4	2	1
	0	5		7	8	1	1	2	1	1	1	1
1	1	5		7	8	2	1	1	1	1	1	1
1	1	5		7	8	1	1	1	1	1	1	1
	0	5		7	8	1	1	1	1	1	1	1
1	2	1		7	8	1	1	5	1	3	1	24
	4	1		7	8	3	1	2	1	1	1	1
	6	5		5	7	3	2	6	1	1	1	1
	0	5		7	8	1	1	1	1	1	1	1
	0	1		6	7	2	1	2	1	1	1	4
	2	5		3	5	4	2	6	3	4	2	1
	2	6		8	9	1	1	1	1	1	1	1
	2	6		8	9	1	1	1	1	1	1	1
	2	5		7	9	1	1	1	1	1	1	1
	2	5		7	8	1	1	1	1	1	1	1
	0	6		8	9	1	1	1	1	1	1	1
	2	1		8	9	1	1	1	1	1	1	1
	1	1		8	9	1	1	1	1	1	1	1
	1	1		8	9	1	1	1	1	1	1	1
	3	1		8	9	1	1	1	1	1	1	1
	0	1		8	9	1	1	1	1	1	1	1

	1	1		8	9	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	0	1		8	9	1	1	1	1	1	1		1
	1	1		8	9	1	1	1	1	1	1		1
2	0	3	3	7	8	1	1	1	1	1	1		1
2	0	2	3	7	8	1	1	1	1	1	1		1
	1	5		3	7	3	2	3	1	3	3	144	8
	2	5		3	5	3	2	6	1	4	3	24	4
	0	5		7	8	1	1	1	1	1	1		1
	0	1		7	8	2	1	2	4	3	3	48	5
	3	5		7	8	1	1	2	1	1	1		1
	1	2	1	6	7	3	2	2	1	1	1		1
	2	5		7	8		1	1	1	1	1		1
	0	3		5	7	3	2	6	1	1	1	36	5
	2	1		7	8	2	1	2	1	1	1		1
	0	1		7	8	1	1	1	1	1	1		1
	2	1		7	8	1	1	2	1	1	1		1
	1	1		7	8	2	1	2	1	1	1		1
	2	4		3	7	3	2	6	1	1	3	24	1
	2	5		7	8	1	1	1	1	1	1		1
	3	1		7	8	1	1	1	1	1	1		1
	2	1		7	8	1	1	1	1	1	1		1
	0	5		8	9	1	1	2	1	1	1		1
	0	1		7	8	1	1	1	1	1	1	1	1
	1	1		8	9	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	2	1		7	8	1	1	1	1	1	1		1
	3	1		8	9	1	1	1	1	1	1		1
	0	1		7	9	1	1	1	1	1	1		1
	0	1		8	9	1	1	1	1	1	1		1
	1	1		8	9	1	1	1	1	1	1		1

	1	1		8	9	1	1	1	1	1	1		1
	2	1		7	8	1	1	1	1	1	1		1
	1	1		3	6	3	2	6	3	4	3	120	9
	2	1		7	8	2	1	4	3	4	3	168	12
	0	1		7	8	1	1	2	1	1	1		1
	3	1		7	8	1	1	1	1	1	1		1
	1	1		7	8	1	1	1	1	1	1		1
	2	1		7	8	1	1	1	1	1	1		1
	3	2	3	7	8	1	1	1	1	1	1		1
1	2	1		8	9	1	1	2	1	1	1		1
	2	3		7	9	1	1	2	1	1	1		1
	0	1		5	7	3		6	1	1	1		1
	2	5		8	9	1	1	1	1	1	1		1
	0	5		8	9	1	1	1	1	1	1		1
	1	5		8	9	1	1	1	1	1	1		1
	0	5		8	9	1	1	1	1	1	1		1
	2	5		8	8	1	1	1	1	1	1		1
	6	5	1	7	9	1	1	1	1	1	1		1
	0	6		8	9	1	1	1	1	1	1		1
1	2	1		7	9	1	1	2	1	1	1		1
	0	5		8	9	1	1	1	1	1	1		1
	0	6		7	8	1	1	1	1	1	1		1
	0	1		7	9	1	1	1	1	1	1		1
	2	5		8	9	1	1	1	1	1	1		1
1	2	5		8	9	1	1	1	1	1	1		1
	0	5		8	9	1	1	1	1	1	1		1
	1	2	3	7	8	1	1	1	1	1	1		1
	2	1		7	8	3	2	2	3	4	2		1
	2	1		7	8	2	1	2	1	1	1		4
	0	5		7	8	1	1	2	1	1	1		1
	2	1		6	8	2	1	3	1	4	3		1
	2	1		7	9	1	1	2	1	1	1		1
	2	5		4	7	3	2	6	1	3	3	120	8

	2	2	1	7	8	1	1	2	1	1	1	1
	2	5		7	8	1	1	2	1	1	1	1
1	2	5		8	9	1	1	1	1	1	1	1
2	3	3		7	8	1	1	2	1	1	1	1
	3	1		8	9	1	1	2	1	1	1	1
	2	5		7	8	1	1	1	1	1	1	1
	1	1		7	9	1	1	2	1	1	1	1
	0	1		5	6	3	2	3	1	3	3	1
2	0	3		7	8	2	1	2	1	1	1	1
2	0	4		7	8	1	1	2	1	1	1	1
	2	1		8	9	1	1	2	1	1	1	1
	2	5	3	7	8	1	1	2	1	1	1	1
	1	1		7	8	1	1	2	1	1	1	1
	3	2	3	6	7	2	1	2	1	3	3	168	9
	2	1	1	7	8	1	1	1	2	1	1	1
	2	5	3	7	8	2	1	2	1	1	1	1
	1	1	1	3	5	3	2	6	1	1	3	48	3
	5	5		7	8	1	1	2	1	1	1	1
	0	5		7	8	1	1	1	1	1	1	1
	1	1		7	8	1	1	1	1	1	1	1
	2	1		8	9	1	1	1	1	1	1	1
	2	1		8	9	1	1	1	1	1	1	1
	1	1		7	9	1	1	1	1	1	1	1
	3	1		8	9	1	1	1	1	1	1	1
	2	1		9	9	1	1	1	1	1	1	1
	2	1		7	9	1	1	1	1	1	1	1
	1	1		8	9	1	1	1	1	1	1	1
	0	1		8	9	1	1	1	1	1	1	1
	1	1		7	8	1	1	1	1	1	1	1
	2	2	2	7	8	2	1	2	1	1	1	1
	1	1		7	8	1	1	1	1	1	1	1
	1	2	3	6	7	2	1	2	1	1	1	1
	0	1		7	9	1	1	1	1	1	1	1

	2	1		7	8	1	1	2	1	1	1		1
	0	6		7	8	1	1	2	1	1	1		1
	1	1		7	8	1	1	2	1	2	1		1
	0	4		3	7	3	2	6	1	2	3	48	2
	2	1		7	8	1	1	2	1	1	1		1
	2	1		8	9	1	1	2	1	1	1		1
	2	2	3	7	8	1	1	2	1	1	1		1
	0	1		8	9	1	1	1	1	1	1		1
	2	3		7	8	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
1	1	1		8	9	1	1	1	1	1	1		1
1	1	1		7	8	1	1	1	1	1	1		1
	0	2	3	7	8	1	1	1	1	1	1		1
	1	5		8	9	1	1	1	1	1	1		1
	1	1		8	9	1	1	1	1	1	1		1
	2	2	3	7	8	1	1	2	1	1	1		1
	2	6		8	9	1	1	1	1	1	1		1
	0	6		8	9	1	1	1	1	1	1		1
	0	5		7	8	1	1	1	1	1	1		1
	1	5		7	8	1	1	1	1	1	1		1
	1	5	3	7	8	1	1	1		1	1		1
1	0	6		8	9	1	1	1	1	1	1		1
	0	2	3	7	8	1	1	2	1	1	1		1
	1	2	1	3	7	3	2	6	1	1	3	120	8
	2	1		7	8	1	1	1	1	1	1		1
	0	1		7	8	1	1	1	1	1	1		1
	1	1		8	9	1	1	2	1	1	1		1
	1	5	1	7	8	1	1	1	1	1	1		1
	2	5		7	8	1	1	1	1	1	1		1
	4	2	2	7	8	2	1	1	1	1	1		1
	2	6		8	9	1	1	1	1	1	1		1
	0	2		7	8	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1

	2	5		8	9	1	1	1	1	1	1	1
	0	5		7	8	1	1	1	1	1	1	1
	2	5		8	9	1	1	1	1	1	1	1
	3	5	3	7	8	1	1	1	1	1	1	1
1	3	1		8	9	1	1	1	1	1	1	1
	3	1		7	8	1	1	1	1	1	1	1
	0	1		8	9	1	1	1	1	1	1	1
	1	3		7	8	1	1	1	1	1	1	1
	1	5		7	8	1	1	1	1	1	1	1
	2	5		5	7	3	2	6	1	1	3	48	5
	1	5		7	8	1	1	2	1	1	1		5
	0	2	3	7	8	1	1	2	1	1	1		1
	1	1		7	8	1	1	2	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	2	5		7	8	1	1	2	1	1	3	120	1
	2	1		8	9	1	1	1	1	1	1		1
	1	5		5	7	3	2	6	1	1	3	24	1
	2	5		7	8	1	1	1	1	1	1		1
	2	5		7	8	1	1	1	1	1	1		1
	0	5		8	9	1	1	1	1	1	1		1
	1	6		7	8	1	1	1	1	1	1		1
	1	1		7	8	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
2	3	3		7	8	1	1	2	1	1	1		1
	3	1		8	9	1	1	2	1	1	1		1
	2	5		7	8	1	1	1	1	1	1		1
	1	1		7	9	1	1	2	1	1	1		1
	0	1		5	6	3	2	3	1	3	3		1
2	0	3		7	8	2	1	2	1	1	1		1
2	0	4		7	8	1	1	2	1	1	1		1
	2	1		8	9	1	1	2	1	1	1		1
	2	5	3	7	8	1	1	2	1	1	1		1
	1	1		7	8	1	1	2	1	1	1		1

	3	2	3	6	7	2	1	2	1	3	1	1
	2	1	1	7	8	1	1	1	2	1	1	1
	2	5	3	7	8	2	1	2	1	1	1	1
	1	1	1	3	5	3	2	6	1	1	3	48	3
	5	5		7	8	1	1	2	1	1	1	1
	0	5		7	8	1	1	1	1	1	1	1
	1	1		7	8	1	1	1	1	1	1	1
	2	1		8	9	1	1	1	1	1	1	1
	2	1		8	9	1	1	1	1	1	1	1
	1	1		7	9	1	1	1	1	1	1	1
	3	1		8	9	1	1	1	1	1	1	1
	2	1		9	9	1	1	1	1	1	1	1
	2	1		7	9	1	1	1	1	1	1	1
	1	1		8	9	1	1	1	1	1	1	1
	0	1		7	8	1	1	1	1	1	1	1
	2	1		7	8	1	1	1	1	1	1	1
	0	1		7	8	1	1	1	1	1	1	1
	1	1		8	9	1	1	1	1	1	1	1
	1	1		7	8	1	1	2	1	1	3	168	8
	1	3		3	7	3	2	6	1	2	3	36	1
	1	1		7	8	2	1	2	1	3	3	76	1
	0	5		3	6	3	2	6	3	4	2		1
	2	1		4	7	3	2	6	1	2	3	120	8
	3	5		7	8	1	1	2	1	1	1	1
	2	6		7	8	1	1	2	1	1	1	1
	2	1		8	9	1	1	2	1	1	1	1
	0	2	3	7	8	2	1	2	1	1	1	1
	1	6		8	9	1	1	2	1	2	1	1
	0	2	1	7	9	1	1	1	1	1	1	1
1	1	5		7	8	1	1	2	1	1	1	1
	1	5		3	7	3	2	3	1	3	3	144	8
	2	5		3	5	3	2	6	1	4	3	24	4
	0	5		7	8	1	1	1	1	1	1	1

0	1		7	8	2	1	2	4	3	3	48	5
3	5		7	8	1	1	2	1	1	1		1
1	2	1	6	7	3	2	2	1	1	1		1
2	5		7	8		1	1	1	1	1		1
0	3		5	7	3	2	6	1	1	1	36	5
2	1		7	8	2	1	2	1	1	1		1
0	1		7	8	1	1	1	1	1	1		1
0	5		8	9	1	1	1	1	1	1		1
1	1		8	9	1	1	2	1	1	1		1
2	2	3	8	9	1	1	1	1	1	1		1
0	1		7	8	1	1	2	1	1	1		1
0	5		7	8	1	1	1	1	1	1		1
4	5		7	8	1	1	1	1	1	1		1
0	1		7	8	1	1	1	1	1	1		1
4	5		7	8	1	1	1	1	1	1		1
3	5		8	9	1	1	5	1	2	1		1
2	1		8	9	1	1	1	1	1	1		1
2	5		6	8	3	2	2	1	1	1		1
3	1		7	9	1	1	2	1	1	1		1
2	4		7	9	1	1	1	1	1	1		1
2	1		7	8	1	1	2	1	1	1		1
0	5		4	8	3	2	2	2	3	3	96	7
2	5		5	7	3	2	2	1	1	1		1
0	1		7	8	1	1	5	1	2	1		1
0	1		7	8	1	1	2	1	1	1		1
0	1		7	8	1	1	2	1	1	1		1
2	5		7	8	1	1	2	1	1	1		1
0	1		7	8	1	1	2	1	1	1		1
1	1		8	9	1	1	2	1	1	1		1
3	1		7	8	1	1	2	1	1	1		1
1	5		7	8	1	1	1	1	1	1		1
2	5		7	8	1	1	2	1	2	3	72	1
1	5		6	7	3	2	6	2	1	1		1

	1	5		7	8	1	1	2	1	1	1		1
	0	5		7	8	1	1	1	1	1	1		1
	2	5		7	8	1	1	1	1	1	1		1
	2	6		8	9	1	1	1	1	1	1		1
	0	5		7	8	2	1	3	2	4	3	168	1
	1	1		3	5	3	2	6	1	2	3	72	1
	0	5		7	8	1	1	5	3	3	3	48	5
1	2	1		7	8	1	1	2	1	1	1		1
1	2	1		8	9	1	1	2	1	1	1		1
	2	3		7	8	1	1	3	1	3	3	48	5
	1	1		7	8	1	1	1	1	1	1		1
	0	1	2	7	8	1	1	1	1	1	1		1
	1	1		8	9	1	1	1	1	1	1		1
	0	2	3	7	8	1	1	4	2	1	1		1
	0	2	3	7	8	2	1	2	1	1	1		1
	0	2	3	7	8	1	1	2	1	1	1		1
	2	5		8	9	1	1	1	1	1	1		1
	0	5		7	8	1	1	1	1	1	1		1
	2	5		8	9	1	1	1	1	1	1		1
	3	5	3	7	8	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	3	1		7	8	1	1	1	1	1	1		1
	0	1		8	9	1	1	1	1	1	1		1
	1	3		7	8	1	1	1	1	1	1		1
	1	5		7	8	1	1	1	1	1	1		1
	2	5		7	8	1	1	6	1	1	3	48	5
	1	5		7	8	1	1	2	1	1	1		5
	0	2	3	7	8	1	1	2	1	1	1		1
	1	1		7	8	1	1	2	1	1	1		1
	2	5		7	8	1	1	2	1	1	3	120	1
	1	5		5	7	3	2	6	1	1	3	24	1
	0	1		7	8	1	1	1	1	1	1		1
	2	1		7	8	1	1	2	1	1	1		1

	1	1		7	8	1	1	1	1	1	1		1
2	1	5		7	8	1	1	2	3	4	3	120	8
	1	1		7	8	1	1	2	1	1	1		1
1	0	5		7	8	1	1	2	1	1	1		1
	3	2	3	7	8	1	1	2	4	3	3	96	6
	1	1		5	8	3	2	6	1	1	3	48	6
	0	5	1	4	6	3	2	6	1	4	3	48	6
	0	1		7	8	1	1	2	3	3	3	120	8
	1	1		7	8	1	1	2	1	1	1		1
	1	1		7	8	1	1	2	1	1	3	72	1
	2	1		7	8	1	1	2	1	1	1		1
	2	3		8	9	1	1	2	1	1	1		1
	2	1		7	8	1	1	2	1	1	3	120	9
	1	2	3	7	8	1	1	2	1	1	1		1
	0	2	3	7	8	2	1	2	2	4	3	144	10
2	1	5		7	8	1	1	2	1	1	2		1
	1	6		5	8	2	2	6	1	4	2		1
	7	5		3	5	3	2	6	1	4	3	24	5
	2	1		6	8	2	1	5	1	3	3	168	11
	1	1		8	9	1	1	1	1	1	1		1
	0	1		7	8	1	1	1	1	1	1		1
	2	1		8	9	1	1	2	1	1	1		1
	2	1		7	8	1	1	2	1	1	1		1
	0	1		6	8	3	2	6	1	1	1		1
	2	1		4	7	3	2	6	4	2	3	48	1
	2	1		7	8	1	1	2	1	1	1		1
	0	1		8	9	1	1	1	1	1	1		1
	1	1		8	9	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	1	1		7	8	1	1	2	1	1	1		1
1	2	1		5	7	3	2	6	3	4	2		1
	3	1		5	7	3	2	6	3	4	2		1
	0	5		7	8	1	1	2	1	1	1		1

	1	1		7	8	1	1	2	1	1	1		1
1	2	1		5	7	3	2	6	3	4	2		1
	2	1		7	8	1	1	2	3	3	1		1
	2	1		7	8	2	1	3	2	4	3		1
	1	1		7	8	1	1	2	1	1	1		1
	1	1		7	8	1	1	2	1	1	1		1
	3	2	3	7	8	1	1	2	1	1	1		1
2	0	5		7	9	1	1	2	1	1	1		1
2	0	5		7	8	1	1	2	1	1	1		1
2	0	5		7	9	1	1	2	1	1	1		1
2	0	5		7	9	1	1	2	1	1	1		1
	0	5		8	9	1	1	1	1	1	1		1
	1	1		8	9	1	1	2	1	1	1		1
	2	2	3	8	9	1	1	1	1	1	1		1
	0	1		7	8	1	1	2	1	1	1		1
	0	5		7	8	1	1	1	1	1	1		1
	4	5		7	8	1	1	1	1	1	1		1
	3	2	3	7	8	1	1	2	4	3	3	96	6
	1	1		5	8	3	2	6	1	1	3	48	6
	0	5	1	4	6	3	2	6	1	4	3	48	6
	0	1		7	8	1	1	2	3	3	3	120	8
	1	1		7	8	1	1	2	1	1	1		1
	1	1		7	8	1	1	2	1	1	3	72	1
	0	1	2	7	8	1	1	1	1	1	1		1
	1	1		8	9	1	1	1	1	1	1		1
	0	2	3	7	8	1	1	4	2	1	1		1
	0	2	3	7	8	2	1	2	1	1	1		1
	0	2	3	7	8	1	1	2	1	1	1		1
	0	1		7	8	1	1	4	4	4	3	168	10
	1	1		7	8	2	1	4	3	3	3	72	5
	2	1		7	8	1	1	2	1	1	1		1
	2	1		7	8	1	1	2	1	1	1		1
	0	5		7	9	1	1	1	1	1	1		1

	2	1		7	9	1	1	2	1	1	1		1
	2	5		7	9	1	1	1	1	1	1		1
	2	1		3	5	3	2	6	1	3	3	120	9
	3	5		7	8	3	1	5	1	2	3	72	1
	1	5	3	7	9	1	1	2	1	1	1		1
	0	5		5	8	3	2	2	1	1	1		1
	0	3		7	8	1	1	1	1	1	1		1
	3	2	3	7	8	1	1	2	1	1	1		1
	3	5		7	8	1	1	2	1	1	1		1
	2	5		8	9	1	1	1	1	1	1		1
	0	5		8	9	1	1	1	1	1	1		1
	0	5	1	7	8	1	1	1	1	1	1		1
	0	5		7	8	1	1	1	1	1	1		1
	2	1		7	8	1	1	5	1	3	3	24	5
	1	5	3	7	9	1	1	2	1	1	1		1
	2	1		7	8	1	1	2	1	1	1		1
2	2	1		7	8	1	1	2	1	1	1		1
2	2	1		7	8	1	1	2	1	1	1		1
	2	2	3	7	8	1	1	1	1	1	1		1
	1	1		7	8	1	1	2	1	1	1	1	1
	0	1		8	9	1	1	1	1	1	1		1
	2	1		7	8	1	1	2	1	1	1		1
	2	1		7	8	1	1	2	1	1	1		1
	1	1		8	9	1	1	1	1	1	1		1
	6	1		8	9	1	1	1	1	1	1		1
	6	1		7	8	1	1	1	1	1	1		1
	0	1		7	8	1	1	1	1	1	1		1
	0	5	3	7	8	1	1	3	1	4	3		1
	1	1		7	8	1	1	3	1	3	3		1
	2	1		6	7	2	1	2	1	1	1		1
	2	2	1	7	8	1	1	2	1	3	3	120	9
	2	1		8	9	1	1	8	1	1	1		1
	0	5		7	8	1	1	1	1	1	1		1

2	5		8	9	1	1	5	1	2	1		1
2	4		7	8	1	1	8	1	1	1		1
3	2	3	7	8	1	1	2	1	1	1		1
4	1		3	5	3	2	6	3	3	3	144	9
2	1		7	8	1	1	1	1	1	1		1
0	1		8	9	1	1	1	1	1	1		1
1	1		7	8	1	1	1	1	1	1		1
1	2	3	2	5	4	2	6	1	4	2		1
0	3		3	7	3	2	6	3	3	3	120	10
2	1		7	8	2	1	2	1	1	1		1
0	1		8	9	1	1	2	1	1	1		1
2	2	3	8	9	1	1	2	1	1	1		1
2	1		8	9	1	1	1	1	1	1		1
0	5		8	9	1	1	2	1	1	1		1
0	1		8	9	1	1	2	1	1	1		1
2	1		8	9	1	1	2	1	1	1		1
2	1		7	8	1	1	2	1	1	1		1
0	5	3	7	8	1	1	2	1	1	1		1
2	2	3	8	9	1	1	1	1	1	1		1
2	1	1	7	8	1	1	1	1	1	1		1
1	5		7	9	1	1	1	1	1	1		1
0	5		7	8	2	1	1	1	1	1		1
2	5		8	9	1	1	2	1	1	1		1
0	5		8	9	1	1	1	1	1	1		1
3	5		8	9	1	1	1	1	1	1		1
0	5		7	9	1	1	1	1	1	1		1
2	5	1	7	8	1	1	1	1	1	1		1
4	1		7	8	1	1	1	1	1	1		1
2	1		7	8	1	1	1	1	1	1		1
0	1		7	8	1	1	1	1	1	1		1
3	2		7	9	1	1	1	1	1	1		1
2	1		7	8	1	1	1	1	1	1		1
2	1		7	8	1	1	2	3	1	1		1

0	1		8	9	1	1	1	1	1	1		1
2	1		7	9	1	1	1	1	1	1		1
0	5		8	9	1	1	1	1	1	1		1
2	5		7	8	1	1	1	1	1	1		1
2	1		7	8	1	1	1	1	1	1		1
1	1		3	5	3	2	6	1	4	3		1
0	5		7	9	1	1	2	1	1	1		1
4	5		8	9	1	1	7	1	1	1		1
0	5		7	8	1	1	2	1	1	1		1
2	1		5	7	3	2	3	3	3	2		1
2	1		7	8	1	1	2	1	1	1		1
0	5		7	9	1	1	1	1	1	1		1
2	1		7	9	1	1	2	1	1	1		1
2	5		7	9	1	1	1	1	1	1		1
2	1		3	5	3	2	6	1	3	3	120	9
3	5		7	8	3	1	5	1	2	3	72	1
1	5	3	7	9	1	1	2	1	1	1		1
0	5		5	8	3	2	2	1	1	1		1
0	3		7	8	1	1	1	1	1	1		1
3	2	3	7	8	1	1	2	1	1	1		1
3	5		7	8	1	1	2	1	1	1		1
2	5		8	9	1	1	1	1	1	1		1
0	5		8	9	1	1	1	1	1	1		1
0	5	1	7	8	1	1	1	1	1	1		1
0	5		7	8	1	1	1	1	1	1		1
2	1		7	8	1	1	5	1	3	3	24	5
1	5	3	7	9	1	1	2	1	1	1		1
2	1		7	8	1	1	2	1	1	1		1
1	1		7	8	1	1	2	1	1	1	1	1
0	1		8	9	1	1	1	1	1	1		1
2	1		7	8	1	1	2	1	1	1		1
0	5	3	7	8	1	1	2	1	1	1		1
2	2	3	8	9	1	1	1	1	1	1		1

	2	1	1	7	8	1	1	1	1	1	1		1
	1	5		7	9	1	1	1	1	1	1		1
	0	5		7	8	2	1	1	1	1	1		1
	2	5		8	9	1	1	2	1	1	1		1
	0	5		8	9	1	1	1	1	1	1		1
	3	5		8	9	1	1	1	1	1	1		1
	0	5		7	9	1	1	1	1	1	1		1
	2	5	1	7	8	1	1	1	1	1	1		1
	4	1		7	8	1	1	1	1	1	1		1
	2	1		7	8	1	1	1	1	1	1		1
	0	1		7	8	1	1	1	1	1	1		1
	3	2		7	9	1	1	1	1	1	1		1
	2	1		7	8	1	1	1	1	1	1		1
	2	1		7	8	1	1	2	3	1	1		1
	2	2	3	7	8	1	1	1	1	1	1		1
	1	1		7	8	1	1	2	1	1	1	1	1
	3	1		8	9	1	1	2	1	1	1		1
	3	5		7	9	1	1	2	1	1	1		1
	1	1		8	9	1	1	1	1	1	1		1
2	0	5		7	9	1	1	1	1	1	1		1
2	0	5		7	9	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	2	4	1	7	8	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	1	1		7	8	1	1	2	3	1	1		1
	1	4	1	8	9	1	1	1	1	1	1		1
	2	1		8	9	1	1	1	1	1	1		1
	3	2		8	9	1	1	1	1	1	1		1
	2	1		8	9	1	1	2	1	1	1		1
	2	1		7	8	2	1	3	4	4	2		1
	0	1		7	8	1	1	3	2	3	3		1
	1	5		6	7	3	2	3	1	4	3		1
	2	5		7	8	1	1	2	1	1	1		1

0	5		7	8	1	1	2	1	1	1		1
0	5		7	8	1	1	2	1	1	1		1
1	5	1	8	9	1	1	2	1	1	1		1
2	5		7	8	1	1	1	1	1	1		1
0	1		7	8	2	1	3	1	4	1		1
2	2	2	7	8	1	1	2	1	1	1		1
2	1		7	8	1	1	2	1	1	1		1
0	3	1	7	8	2	1	5	1	3	3		1
0	5		7	9	1	1	2	1	1	1		1
4	1		8	9	1	1	1	1	1	1		1
2	5		7	8	1	1	1	1	1	1		1
2	1	2	6	7	3	2	6	1	1	3		1
0	1		7	8	1	1	5	1	3	3	72	6
0	5		7	9	1	1	2	1	1	1		1
2	1		7	8	1	1	2	1	1	1		1
0	1		6	7	3	2	2	1	1	3	120	1
2	1		7	8	1	1	2	1	1	3	48	5
1	1		7	9	1	1	2	1	1	1		1
2	5		7	8	1	1	2	1	1	1		1
0	5		8	9	1	1	1	1	1	1		1
3	5		8	9	1	1	1	1	1	1		1
0	5		7	9	1	1	1	1	1	1		1
2	5	1	7	8	1	1	1	1	1	1		1
4	1		7	8	1	1	1	1	1	1		1
2	1		7	8	1	1	1	1	1	1		1
0	1		7	8	1	1	1	1	1	1		1
3	2		7	9	1	1	1	1	1	1		1
2	1		7	8	1	1	1	1	1	1		1
2	1		7	8	1	1	2	3	1	1		1
2	2	3	7	8	1	1	1	1	1	1		1
1	1		7	8	1	1	2	1	1	1	1	1
3	1		8	9	1	1	2	1	1	1		1
3	5		7	9	1	1	2	1	1	1		1

1	1		8	9	1	1	1	1	1	1		1
0	5		7	9	1	1	1	1	1	1		1
2	1		7	9	1	1	2	1	1	1		1
2	5		7	9	1	1	1	1	1	1		1
2	1		3	5	3	2	6	1	3	3	120	9
3	5		7	8	3	1	5	1	2	3	72	1
1	5	3	7	9	1	1	2	1	1	1		1
0	5		5	8	3	2	2	1	1	1		1
0	3		7	8	1	1	1	1	1	1		1
3	2	3	7	8	1	1	2	1	1	1		1
3	5		7	8	1	1	2	1	1	1		1
2	5		8	9	1	1	1	1	1	1		1
1	4	1	8	9	1	1	1	1	1	1		1
2	1		8	9	1	1	1	1	1	1		1
3	2		8	9	1	1	1	1	1	1		1
2	1		8	9	1	1	2	1	1	1		1
2	1		7	8	2	1	3	4	4	2		1
0	1		7	8	1	1	3	2	3	3		1
1	5		6	7	3	2	3	1	4	3		1
2	5		7	8	1	1	2	1	1	1		1
3	5		7	8	3	1	5	1	2	3	72	5
1	5	3	7	9	1	1	2	1	1	1		1
0	5		5	8	3	2	2	1	1	1		1
0	3		7	8	1	1	1	1	1	1		1
3	2	3	7	8	1	1	2	1	1	1		1
3	5		7	8	1	1	2	1	1	1		1
2	5		8	9	1	1	1	1	1	1		1
0	5		8	9	1	1	1	1	1	1		1
0	5	1	7	8	1	1	1	1	1	1		1
0	5		7	8	1	1	1	1	1	1		1
2	1		7	8	1	1	5	1	3	3	24	5
1	5	3	7	9	1	1	2	1	1	1		1
2	1		7	8	1	1	2	1	1	1		1

1	1		7	8	1	1	2	1	1	1	1	1
7	5		3	5	3	2	6	1	4	3	24	5
2	1		6	8	2	1	5	1	3	3	168	11
1	1		8	9	1	1	1	1	1	1		1
0	1		7	8	1	1	1	1	1	1		1
2	1		8	9	1	1	2	1	1	1		1
2	1		7	8	1	1	2	1	1	1		1
0	1		6	8	3	2	6	1	1	1		1
2	1		4	7	3	2	6	4	2	3	48	1
2	1		7	8	1	1	2	1	1	1		1
0	1		8	9	1	1	1	1	1	1		1
1	1		8	9	1	1	1	1	1	1		1
2	1		8	9	1	1	1	1	1	1		1
0	1		8	9	1	1	2	3	1	1		1
0	1		7	8	1	1	2	1	1	1		1
2	5		8	9	1	1	2	1	1	1		1
2	1		8	9	1	1	2	1	1	1		1
1	1		7	9	1	1	2	1	1	1		1
1	5		8	9	1	1	1	1	1	1		1
2	5		8	9	1	1	1	1	1	1		1
2	5		8	9	1	1	1	1	1	1		1
1	5		7	8	1	1	1	1	1	1		1
0	1		8	9	1	1	1	1	1	1		1
1	1		8	9	1	1	2	1	1	1		1
1	1		7	8	1	1	2	1	1	1		1
2	1		8	9	1	1	2	1	1	1		1
2	1		8	9	1	1	2	1	1	1		1
0	1		3	7	3	2	6	1	1	1		1
1	1		7	8	2	1	2	1	3	3	48	7
0	1		7	8	1	1	3	3	4	3	168	12
2	1		4	7	3	2	3	3	4	3		1
3	1		7	8	2	1	3	1	4	3	168	11
6	3	3	6	7	3	1	2	3	3	3	96	7

	2	1				1	1	2	1	1	1		1
	0	1		7	8	1	1	2	1	1	3	120	9
	6	5		7	8	2	1	3	2	3	3	100	8
	0	1		7	8	1	1	3	1	3	3	120	9
	0	2	3	3	8	3	2	6	3	4	3	96	6
	0	1		7	8	2	1	3	3	4	3		1
	3	2	1	7	8	1	1	2	1	1	1		1
	2	5		8	9	1	1	2	1	1	1		1
	6	3	3	7	8	1	1	5	1	3	3	24	7
	3	5		3	7	3	2	6	1	2	3		1
	0	5	3	8	9	1	1	2	1	1	3		1
	2	1		8	9	1	1	2	1	1	1		1
	0	5		8	9	1	1	2	1	1	1		1
1	2	1		8	9	1	1	2	1	1	1		1
1	2	1		7	8	1	1	2	1	1	1		1
	2	5		6	7	3	2	3	2	4	2		1
	0	5		7	9	1	1	3	1	3	3	48	5
	2	1		5	6	3	2	3	3	4	2		1
	1	5		5	7	3	2	3	1	4	3	160	9
	1	1		5	7	3	2	6	1	3	3	168	12
	0	2	3	8	9	1	1	2	1	1	1		1
	1	3		6	7	3	2	6	1	2	3	72	1
	0	5		3	7	3	2	6	1	2	3		1
	1	1		7	8	1	1	8	1	2	3		1
	3	1		8	9	1	1	2	1	1	1		1
	0	5		7	9	1	1	2	1	1	1		1
	4	1		8	9	1	1	1	1	1	1		1
	2	5		7	8	1	1	1	1	1	1		1
	2	1	2	6	7	3	2	6	1	1	3		1
	0	1		7	8	1	1	5	1	3	3	72	6
	0	5		7	9	1	1	2	1	1	1		1
	1	1		3	5	3	2	3	3	4	3		1
	0	1		7	8	1	1	2	2	1	1		1

0	5		6	9	3	2	6	1	2	3		1
0	1		6	7	3	2	2	1	4	2		1
1	6		7	8	1	1	2	1	1	1		1
1	5		8	9	1	1	2	1	1	1		1
0	1		7	8	1	1	2	3	3	3		1
0	1		3	7	3	2	6	3	3	3		1
1	1		8	9	1	1	2	1	1	1		1
0	2	1	7	8	1	1	4	3	3	3	180	12
2	2		7	8	2	1	4	3	3	3	240	15
1	1		7	8	1	1	3	1	3	3		1
1	1		6	7	3	1	3	1	3	2		1

Sequestration	ABO setting	Rh setting	Polycythemia	SBIL H24	SBIL H48	SBIL H72	SBIL D5	Peak Bilirubin	Hemolytic	PT	Bilirubin Value	Start time	PT Duration
1	1	1	2	7.7	7.8	9.0	10.0	10.0	1	1			
1	1	1	1	3.0	6.8	8.4	12.3	14.5	1	2	12	96	48
1	1	1	1	4.0	7.0	14.8	8.0	14.8	1	2	15	72	48
1	1	1	1	1.2	6.2	8.7		8.7	1	1			
1	1	1	1	6.2	12.0	13.8	9.5	16.5	1	2	17	100	24
1	2	1	1	3.6	5.8	7.7	5.0	7.7	1	1			
1	1	1	1	7.7	8.2	9.0	9.5	9.5	1	1			
1	1	1	1	1.2	3.2	3.0	2.6	3.2	1	1			
1	1	2	1	7.7	14.6	12.0	8.1	14.6	1	1	15	48	
1	1	1	1	8.6	12.1	11.7	12.0	12.1	1	1			
1	1	1	1	5.6	8.9	8.0	11	11	1	1			
1	1	1	1	2.6	4.7	5.0	4.2	5.0	1	1			
1	1	1	1	3.0	5.6	8.5	7.2	8.5	1	1			
1	1	1	1	7.7	9.2	10.5	12.0	12.0	1	1			
1	1	1	1	7.7	8.0	9.8	10.0	10.0	1	1			
1	2	1	1	6.8	11.0	12.0	13.6	13.6	1	1			
2	1	1	1	3.8	5.4	10.2	12.4	12.4	1	1			
1	1	1	1	3.6	8.0	9.0			1	1			
1	1	1	1	4.8	10.3	12.4			1	1			
1	1	1	1	2.8	5.4	7.7	8.0		1	1			
1	1	1	1	3.0	6.5	9.5	2.0	9.5	1	2	6.5	48.0	72.0
1	1	1	1	4.0	8.8	10.9	11.2	11.2	1	2	8.8	48.0	96.0
1	1	1	1	4.0	7.0	10.0	7.0	11.0	1	2	10.0	72.0	96.0
2	1	1	1	2.8	4.6	7.7	10.4	15.5	1	2	10.4	120.0	120.0
1	1	1	1	7.0	10.0	8.0	8.9	10.0	1	2	10.0	48.0	144.0
1	1	1	1	4.0	7.8	8.0	8.5	8.5	1	1			
1	1	1	1	3.4	6.6	7.0			1	1			
1	2	1	1	1.6	2.2	4.0	4.0	4.0	1	1			
1	2	1	1	3.2	5.4	7.8	1.8	7.8	1	1			

1	1	2	1	1.2	2.8	3.0	4.5	4.5	1	1			
1	1	1	1	1.6	2.2	3.4	3.0	3.4	1	1			
1	1	1	1	2.8	4.6	7.0	10.6	10.6	1	1			
1	1	1	1	0.0	1.2	2.0			1	1			
1	2	1	1	3.4	4.8	7.4	10.5	10.5	1	1			
1	1	1	1	3.8	7.2	10.5	11.6	11.6	1	1			
1	1	1	1	4.6	8.0	10.4	12.8	12.8	1	1			
1	1	1	1	5.0	9.2	12.5	17.6	17.6	1	2	12.5	72.0	120.0
1	1	1	1	0.0	3.6	7.8	8.0	8.0	1	1			
1	1	1	1	6.7	12.4	11.0	8.0	12.4	1	1	12.4	48.0	24.0
1	1	1	1	3.8	4.6	7.7			1	1			
1	1	1	1	4.8	8.6	10.0			1	1			
1	1	1	1	4.8	9.0	10.2	12.6	12.6	1	1			
1	1	1	1	3.6	4.8	5.2	6.0	6.0	1	1			
1	1	1	1	4.6	7.4	9.8	11.5	11.5	1	1			
1	1	1	1	4.8	6.8	8.4	10.8	10.8	1	1			
1	2	1	1	6.8	8.6	10.8	13.8	13.8	1	1			
1	2	1	1	8.0	14.0	18.0	12.0	18.0	2	2	8.0	24.0	144.0
1	2	1	1	0.0	3.6	5.0	5.8	5.8	1	1			
1	2	1	1	8.1	11.6	13.6	8.0	13.6	1	2	13.6	72.0	48.0
1	2	1	1	8.1	12.2	14.0	10.0	14.0	1	2	14.0	72.0	48.0
1	1	2	1	8.9	15.8	14.0	9.0	14.0	2	2	8.9	24.0	120.0
1	2	1	1	9.9	16.7	5.4	6.0	16.7	2	2	9.9	24.0	48.0
1	2	1	1	8.6	14.1	7.0	6.0	14.1	2	2	8.6	24.0	48.0
1	1	1	1	3.6	5.4	5.0	4.8	5.4	1	1			
1	1	1	1	3.0	5.2	6.6	5.2	6.6	1	1			
1	2	1	1	4.8	8.0	9.6	12.0	12.0	1	1			
1	2	1	1	3.8	7.9	11.1	8.0	13.5	1	2	13.5	96.0	24.0
1	2	1	1	4.0	8.8	10.6	9.0	10.6	1	1	10.6		
1	1	1	1	0.0	1.6	2.0	0.0	2.0	1	1			
1	1	1	1	0.0	1.2	3.6	2.8	3.6	1	1			
1	1	2	1	3.6	4.8	6.8	8.4	8.4	1	1			
1	2	1	1	3.0	5.0	6.0	7.9	7.9	1	1			

1	1	1	1	2.2	4.6	6.8	8.6	8.6	1	1			
1	1	1	1	4.5	8.0	13.0	5.0	12.0	1	2	13.0	72.0	24.0
1	1	1	1	0.0	2.6	4.0	5.2	5.2	1	1			
1	1	1	1	4.6	6.8	7.8	10.2	10.2	1	1			
1	1	1	1	1.8	2.0	2.8	0.0	2.8	1	1			
2	1	1	1	4.6	8.2	10.2	12.4	12.4	1	1			
1	1	1	1	0.0	0.0	1.2	0.0	1.2	1	1			
1	1	1		0.0	2.6	3.8	4.8	4.0	1	1			
1	1	1	1	4.6	6.8	10.4	12.9	12.9	1	1			
1	1	1	1	3.4	4.6	6.0	5.5	6.0	1	1			
1	2	1	1	0.0	1.2	1.4	0.0	1.4	1	1			
1	1	1	1	4.6	8.3	15.0	10.0	15.0	1	2	15.0	70.0	
1	1	1	2	5.0	8.2					1			
1	1	1	1	6.9	7.6	8.2	11.2	11.2	1	1			
1	1	1	1	4.0	8.9	7.3	5.8	8.9	1	1			
1	1	1	1	3.6	7.3	8.0	7.0	8.0	1	1			
1	2	1	1	7.7	10.2	13.0	10.0	13.0	1	2	13.0	72.0	48.0
1	1	1	1	0.0	0.0	0.0			1	1			
1	1	2	1	7.0	9.6	10.2			1	1			
1	1	2	1	5.0	7.9	9.7	10.0	10.0	1	1			
1	2	1	1	5.0	10.0	16.8	10.0	16.8	1	2	16.8	72.0	48.0
1	2	1	1	9.0	5.0	4.8	5.0	9.0	1	2	9.0	28.0	48.0
1	1	1	1	7.2						1			
1	1	1	1	4.2	5.0	7.0	9.9	9.9	1	1			
1	1	1	1	2.6	3.0	2.6	1.2	3.0	1	1			
1	1	1	1	4.8	7.8	8.9	10.2	10.2	1	1			
1	1	1	1		5.2	8.0	11.0	11.0	1	1			
1	2	1	1	2.6	5.8	7.0	5.0	7.0	1	1			
1	1	1	1	4.8	6.8	7.8	10.2	10.2	1	1			
1	1	1	1	0.0	1.2	2.6		2.6	1	1			
1	1	1	1	0.0	0.0	1.8			1	1			
1	1	1	1	3.8	5.8	7.2	9.0	9.0	1	1			
1	1	1	1	1.6	3.8				1	1			

1	1	1	1	0.0	4.4	6.8			1	1			
1	1	1	1	3.8	5.9	8.4	11.6	11.6	1	1			
1	1	1	1	0	0.0	1.2		1.2	1	1			
1	1	1	1	4.8	7.6	9.4	12	12	1	1			
1	1	1	1	3.8	6.2	8		8	1	1			
1	2	1	1	3.6	6.8	8.0	5	8	1	1			
1	2	1	1	4.2	5.0	7.0	5.2	7	1	1			
1	1	1	1	3	4.0	7.0	10	10	1	2	7	72	96
1	1	1	1	2	3.0	4.0	4.6	4.6	1	1			
1	2	1	1	7.9	8.6	7.8	3.6	8.6	1	1			
1	2	1	1	4	8.9	10.2	13.2	13.2	1	2	13.2	120	24
1	1	1	1	6.8	7.2	7.6	12	14.3	1	2	14.3	96	24
1	1	1	1	3.4	5.8	9.0	7	9	1	2	9	72	48
1	1	1	1	1.2	2.0	3.0	7.1	7.1	1	1	7.1		
1	1	1	1	7.9	7.8	7.8	8	8	1	1			
1	1	1	1	4.6	7.7	11.4	7.8	11.4	1	2	11.4	76	48
1	2	1	1	5.2	10.8	7.7	5	10.8	1	2	10.8	48	48
1	1	1	1	7	11.2	15.0	7.9	15	1	2	15	72	48
1	1	1	1	1.6	1.8	0.0	0	1.8	1	1			
1	1	1	1	6.5	14.6	13.0	8	13	1	2	14.6	48	48
1	1	1	1	1.2	2.0	2.0	0	2	1	1			
1	1	1	1	4	8.0	10.0	7	10	1	1			
1	1	1	1	3.6	8.2	10.0	11.4	11.4	1	1			
1	2	1	1	3.2	4.6	6.8	7.8	7.8	1	1			
1	1	1	1	2.8	3.8	3.0	2.6	3.8	1	1			
1	1	1	1	3.8		6.7	7.8	7.8	1	1			
2	1	1	1	2.8	5.6	7.2	10.3	10.3	1	1			
1	1	1	1	0	4.1	5.3			1	1			
1	1	1	1	0	0	2.2			1	1			
1	1	1	1	1.2	3.1	6.9		6.9	1	1			
1	2	1	1	1.2	2	4		4	1	1			
1	1	1	1	4.6	5.1	8		8	1	1			
1	1	1	1	5.2	8.9	11	12.8	12.8	1	1			

1	1	1	1	3.6	4.9	6.2	5	6.2	1	1			
1	1	1	1	4.8	6.8	8.9	12	12	1	1			
1	1	1	1	8	12.9	8	6.8	12.9	1	2	8	24	150
1	1	1	1	1.2	3.8	7.8	7	7.8	1	1			
1	2	1	1	0	1.2	2.6	4	4	1	1			
1	1	1	1	6.7	10.2	12	10	12	1	1			
1	1	1	1	0	3.8	7.2	11.7	11.7	1	1			
1	1	1	1	7.2	8.9	10.2	11	11	1	1			
1	1	1	1	10.4	14.6	10.2	7	14.6	1	2	10.4	36	48
1	1	1	1	4.9	8.6	11.1	12.6	12.6	1	1			
1	1	1	1	5.6	10.2	12.9	13.6	13.6	1	1			
1	2	1	1	0	2.6	3.9	5.2	5.2	1	1			
1	1	1	1	1.4	2.9	3.9	3.2	3.9	1	1			
1	2	1	1	1.8	4.3	5	6.7	6.7	1	1			
1	1	1	1	1.2	3.6	4.2	5.2	5.2	1	1			
1	1	1	1	0	0	2.6	1.2	2.6	1	1			
1	1	1	1	2.5	3.7	5	3	5	1	1			
1	1	1	1	1.3	1.8	3.2	2.2	3.2	1	1			
1	1	1	1	2.8	3.4	5.1	4	5	1	1			
1	1	1	1	7.8	13.9				1	1			
1	2	1	1	7.8	10	12.1	13.6	13.6	1	1			
1	2	1	1	0	7.2	5.4	4.6	7.2	1	1			
1	2	1	1	0	1.2	3.8	5.8	5.8	1	1			
1	1	1	1	1.9		3.3	4	4	1	1			
1	1	1	1	0	3.6	5.3	7.2	7.2	1	1			
1	2	1	1	0	0	0			1	1			
1	1	1	1	3.4	6.4	7	8.6	8.6	1	1			
1	1	1	1	2.2	6.8	12.3	9.4	12.3	1	2	12.3	72	
1	1	1	1	6.4	9.3	13.5	7.7	13.5	1	2	9.3	48	96
1	1	1	1	1.2	4.6	7	6.4	7	1	1			
1	1	1	1	1.2	7.8	7	7	7.8	1	2	7.8	48	120
1	1	1	1	2.6	4.8	7	9.9	9.9	1	1			
1	1	1	1	5	7	6	4	7	1	2	7	48	48

1	1	1	1	5.8	6	7.8	5	9.2	1	2	9.2	96	24
1	1	1	1	2.6	4.6	5	9.9	9.9	1	1			
1	1	1	1	0	3	4.4	9	9	1	1			
1	1	1	1	2.8	4.6		10.9	10.9	1	1			
1	1	1	1	3	5	7	10	11	1	2	11	96	48
1	1	1	1	7.2		7.8	9.6	9.6	1	1			
1	1	1	1	2		3.8			1	1			
1	2	1	1	7.2	5.7	4		7.2	1	2	7.2	24	72
1	2	1	1	0	0	3.6	7.8	7.8	1	1			
1	2	1	1	0	2.4	5.6	6		1	1			
1	1	1	1	7.1	7.9	9	10.6	10.6	1	1			
1	1	1	1	4	7.5	12.5	3	12.5	1	2	12.5	72	48
1	1	1	1	2.8	5.2		9.6	9.6	1	1			
1	1	1	1	6.6	2.6	6.5	3.4	6.6	1	2	6.6	24	120
1	1	1	1	2	3.2	4	7.7	7.7	1	1			
1	1	1	1	7.9	11.1	8.5	7	11.1	1	2	11.1	48	48
1	1	1	1	4.6	8.6	18.3	7.5	18.3	1	2	18.3	72	72
1	1	2	1	4	8.4	9	8	9	1	1			
1	2	1	1	7	10.2	15.6	8.2	15.6	1	2	15.6	72	48
1	1	1	1	0	0	1.3	0	1.3	1	1			
1	1	1	1	0	1.8	3	0	3	1	1			
1	1	1	1	0	1.4	0	0	1.4	1	1			
1	1	1	1	2.4	3.8	4.9	8	8	1	1			
2	1	1	1	2.8	4.8	7.4	9	9	1	1			
1	1	1	1	1.6	3.8	4	5	4	1	1			
1	1	1	1	0	4.2	5	6.7	6.7	1	1			
1	1	1	1	0	6	5	3	5	1	1			
1	1	1	1	3.2	5	7.8	10	10	1	1			
1	1	1	1	3	6.2	7.4	8	8	1	1			
1	1	1	1	7.5	10.8	9.2	8	10.8	1	2	10.8	48	120
2	1	1	1	4	6.8	7.4	9.5	9.5	1	1			
1	1	1	1	3.2	6	6.5	8	8	1	1			
1	1	1	1	0	4	8.9	10.2	10.2	1	1			

1	1	1	1	0	7.3	8.5	10.8	10.8	1	1			
1	2	1	1	4	14	30.4	9.4	30.4	2	2	14	48	144
1	1	1	1	2			7.4	7.4	1	1			
2	2	1	1	4.2	10.9	11	9	11	1	1			
1	1	1	1	5.2	10.8	12.8	11.2	12.8	1	1			
1	1	1	1	0	0	1.8	2.6	2.6	1	1			
1	1	1	1	7.6	8.4	9.2	10.5	10.5	1	1			
1	1	1	1	0	0	0	0	0	1	1			
1	1	1	1	2	4.6	5.8	6.8	6.8	1	1			
1	1	1	1	5.8	11	11.6	12	12	1	1			
1	1	1	1	1.2	3.6	5.2	8	8	1	1			
1	1	1	1	6.5	9.5	8	7	9.5	1	1			
1	2	1	1	3.6	5.6	7.7	12.7	12.7	1	1			
1	1	1	1	3.6	5.2	9.6	11	17.6	1	2	17.6	96	48
1	1	1	1	4	6	9	10.6	10.6	1	1			
1	1	1	1	7	11.9	14.5	10	14.5	1	2	14.5	72	48
1	1	1	1	2.4	4.8	5.6	8.9	8.9	1	1			
1	1	1	1	1.8	5.2	6	8.5	8.5	1	1			
1	2	1	1	4.5	6.8	9.2	12.9	12.9	1	1			
1	1	1	1	0	2.8	4	7.7	7.7	1	1			
1	1	1	1	8	14.6	12	10	14.6	1	2	14.6	48	72
1	1	1	1	3.2	5.4	8.5	10.2	10.2	1	1			
1	1	1	1	0	3.6	5	7	7	1	1			
1	1	1	1	3	15.3	24.3	8	24.3	1	2	15.3	48	144
1	1	1	1	4.6	8.6	9.4			1	1			
1	1	1	1	4	8.2	10.6	11.5	11.5	1	1			
1	1	1	1	4.6	5.6	6.2	8.2	8.2	1	1			
1	1	1	1	8.7	9.8	10.4	12.3	12.3	1	1			
1	1	1	1	1.6		4.2	9.2	9.2	1	1			
1	1	2	1		7.8	8	9.4	9.4	1	1			
1	1	1	1	7.7	8	8.6		8.6	1	1			
1	1	1	1	2.4	5	7.8	8	8	1	1			
1	1	1	1	7.3	8.9	10.3	13	13	1	1			

1	1	1	1	0	2.4	4.8	7.7	7.7	1	1			
1	2	1	1	8.2	10.4	12	11	12	1	1			
1	1	1	1	4.2	6.6	8.9		8.9	1	1			
1	1	1	1	5.8	9	12	13.9	13.9	1	1			
1	1	1	1	4.2	9	14	7.5	14	1	2	14	72	48
1	1	1	1	5.9		14	6.8	14	1	2	14	72	48
1	2	1	1		8.2	7.8	5	8.2	1	1			
1	1	1	1		7.7	8.1	5.5	8.1	1	2	8.1	72	48
1	1	1	1	7.7					1	1			
1	1	1	1	5.2	7.8	9.2	11.1	11.1	1	2	9.2	72	72
1	1	1	1	2.6	4.8	6	9.1	9.1	1	2	9.2	120	48
1	2		1	0					1	1			
1	1	1	1	5	7.9	10.2	8	11.3	1	2	10.2	72	72
1	1	1	1	7.8	10.2	12.3		12.3	1	1			
1	1	1	1	7.1	9.5	12.6	15.1	15.9	1	2	15.9	96	96
1	1	1	1	7.8	10.2	12.3		12.3	1	1			
1	1	1	1	4.6	9.2	11.7		11.7	1	1			
1	1	1	1	7.5	9.8	11	14	14	1	1			
1	1	1	1	0	0	0	0	0	1	1			
1	2	1	1	6.3	8.5	10.2	12.5	12.5	1	1			
1	1	1	1	0	3.6	5.4	6.8	6.8	1	1			
1	1	1	1	2.8	3.2	4.2	5	5	1	1			
1	1	1	1	7.8	10.2	12.3		12.3	1	1			
1	1	1	1	2.8	4.6		10.9	10.9	1	1			
1	1	1	1	3	5	7	10	11	1	2	11	96	48
1	1	1	1	7.2		7.8	9.6	9.6	1	1			
1	1	1	1	2		3.8			1	1			
1	2	1	1	7.2	10.2	6.8		10.2	1	2	10.2	48	48
1	2	1	1	0	0	3.6	7.8	7.8	1	1			
1	2	1	1	0	2.4	5.6	6		1	1			
1	1	1	1	7.1	7.9	9	10.6	10.6	1	1			
1	1	1	1	4	7.5	12.5	3	12.5	1	2	12.5	72	48
1	1	1	1	2.8	5.2		9.6	9.6	1	1			

1	1	1	1	6.6	8.6	6.5	3.4	8.6	1	2	8.6	48	48
1	1	1	1	2	3.2	4	7.7	7.7	1	1			
1	1	1	1	7.9	11.1	8.5	7	11.1	1	2	11.1	48	48
1	1	1	1	4.6	8.6	18.3	7.5	18.3	1	2	18.3	72	72
1	1	2	1	4	8.4	9	8	9	1	1			
1	2	1	1	7	10.2	15.6	8.2	15.6	1	2	15.6	72	48
1	1	1	1	0	0	1.3	0	1.3	1	1			
1	1	1	1	0	1.8	3	0	3	1	1			
1	1	1	1	0	1.4	0	0	1.4	1	1			
1	1	1	1	2.4	3.8	4.9	8	8	1	1			
2	1	1	1	2.8	4.8	7.4	9	9	1	1			
1	1	1	1	1.6	3.8	4	5	4	1	1			
1	1	1	1	0	4.2	5	6.7	6.7	1	1			
1	1	1	1	0	6	5	3	5	1	1			
1	2	1	1	9.3	12	17.5	10	17.5	1	2	17.5	72	48
1	1	1	1	4.8	7.8	9.5		9.5	1	1			
1	1	1	1	3.6	5.2					1			
1	1	1	1	3.6	7	9				1			
1	1	1	1	3.2	5.6	10.2	4.6	10.2	1	1			
1	1	1	1		8.1		5.5	5.5	1	1			
1	1	1	1	6.1		11.1	9.5	11.1	1	2	11.1	72	96
1	1	1	1	4	7.8	9.8	4	9.8	1	2	9.8	72	48
1	1	1	1	0	0	1.2	2.4	2.4	1	1			
1	1	1	1	6.8	12.2	10	8.7	12.2	1	1			
1	1	1	1	0	4.3	7.8	10.5	10.5	1	1			
1	1	1	1	7.8	16	15.8	12.4	16	1	2	16	48	120
1	2	1	1	5	7.7	8.7	0	8.7	1	2	8.7	72	48
1	1	1	1	7.7	7.7	8.4	10.4	10.4	1	1			
1	2	1	1	9.2	12.4	13.5	14.8	14.8	1	1			
1	1	1	1	3		7.4	6.6	7.4	1	1			
1	1	1	1	3	4.0	7.0	10	10	1	2	7	72	96
1	1	1	1	2	3.0	4.0	4.6	4.6	1	1			
1	2	1	1	7.9	8.6	7.8	3.6	8.6	1	1			

1	2	1	1	4	8.9	10.2	13.2	13.2	1	2	13.2	120	24
1	1	1	1	6.8	7.2	7.6	12	14.3	1	2	14.3	96	24
1	1	1	1	3.4	5.8	9.0	7	9	1	2	9	72	48
1	1	1	1	1.2	2.0	3.0	7.1	7.1	1	1	7.1		
1	1	1	1	7.9	7.8	7.8	8	8	1	1			
1	1	1	1	4.6	7.7	11.4	7.8	11.4	1	2	11.4	76	48
1	2	1	1	5.2	10.8	7.7	5	10.8	1	2	10.8	48	48
1	2	1	1	2.8	4.8	6.0	9.6	9.6	1	1			
1	1	1	1	0		7.8			1	1			
1	1	1	1	1.2	2.6	4.0	4.2	4.2	1	1			
1	2	1	1	3.4	6.3	7.7	8.4	8.4	1	1			
1	2	1	1	9.5	12.5	14.5	12	14.5	1	1			
1	1	2	1	4.8	7.7	7.0	2.6	7.7	1	1			
1	2	1	1	5.8	8.9	11.2	14.1	14.1	1	1			
1	2	2	1	3	5.0	6.2	9.2	9.2	1	1			
1	1	1	1	2.3	3.0	4.5	5.9	5.9	1	1			
1	1	1	1	1.6	2.2	2.0	0	2.2	1	1			
1	1	1	1	2.9	5.5				1	1			
1	1	1	1	4	8.0	10.0	12	12	1	1			
1	1	1	1	3.8	6.9	8.3	11	11	1	1			
1	1	1	1	0	2.0	3.2	3	3.2	1	1			
1	2	1	1	6	12.1	8.5	10.1	12.1	2	2	12.1	48	120
1	1	1	1	0	2.2	4.0	5.8	5.8	1	1			
1	2	1	1	3.1	5.0	7.5	10.1	10.1	1	2	10.1	120	72
1	1	1	1	1.2		4.2	5.2	5.2	1	1			
1	2	1		5.6	8.0	10.8	11	11	1	1			
1	1	1	1	2	5.0	7.0	9.2	9.2	1	1			
1	2	1	1	10.7	10.5	12.1	8.7	12.1	2	2	10.7	24	120
1	1	1	1	7	11.0	16.1	6.1	16.1	1	2	16.1	72	48
1	1	1	1	5.7	9.8	10.4			1	1			
1	1	1	1	10.7	9.0	7.0	6.8	10.7	1	2	10.4	24	48
1	1	1	1	0	3.6	4.0	3.6	4	1	1			
1	1	1	1	6.8	8.2	10.1	11.6	11.5	1	1			

1	1	1	1	8	12.4	10.0	8	12.4	1	2	12.4	48	48
1	1	1	1	4.1	7.7	8.2	7	8.2	1	1			
1	1	1	1	7.9	12.0	10.0	9	12	1	1			
1	1	1	1	0	1.4	2.0	3.6	3.6	1	1			
1	2	1	1	5.4	7.2	7.0	6	7.2	1	2	7.2	48	120
1	1	1	1	2.6	15.1	12.0	10.2	15.1	1	2	15.1	48	48
1	2	1	1	5.5	6.7	7.8	8.1	8.1	1	1			
1	1	1	1	0	2.3	5.6	8	8	1	1			
1	1	1	1	0	1.4	2.0	6.6	6.6	1	1			
	1	1	1	3	6.9	10.3	7	8	1	2	10.3	48	48
1	1	1	1	0	2.2	4.0	6.6	6.6	1	1			
1	2	1	1	4.8	7.0	12.7	13.2	13.2	1	1			
1	1	1	1	0	2.0	2.8	0	2.8	1	1			
1	2	1	1	0	2.6	3.0			1	1			
1	2	1	1	7.9		8.6			1	1			
1	1	1	1	1.4	2.0	2.0	0	2	1	1			
1	1	1	1	0	2.4	4.8	7.7	7.7	1	1			
1	2	1	1	8.2	10.4	12	11	12	1	1			
1	1	1	1	4.2	6.6	8.9		8.9	1	1			
1	1	1	1	5.8	9	12	13.9	13.9	1	1			
1	1	1	1	4.2	9	14	7.5	14	1	2	14	72	48
1	1	1	1	5.9		14	6.8	14	1	2	14	72	48
1	2	1	1		8.2	7.8	5	8.2	1	1			
1	1	1	1		7.7	8.1	5.5	8.1	1	2	8.1	72	48
1	1	1	1	5.5	6.8	7	8.8	8.8	1	1			
1	1	1	1	5.2	7.8	9.2	11.1	11.1	1	2	9.2	72	72
1	1	1	1	2.6	4.8	6	9.1	9.1	1	2	9.2	120	48
1	2		1	0					1	1			
1	1	1	1	5	7.9	10.2	8	11.3	1	2	10.2	72	72
1	1	1	1	7.1	9.5	12.6	15.1	15.9	1	2	15.9	96	96
1	1	1	1	4.6	9.2	11.7		11.7	1	1			
1	1	1	1	0	4	11	13	13	1	1			
1	2	1	1	0	0	1.2	2.4	2.4	1	1			

1	1	1	1	3.3	6	9.3	11	11	1	1			
1	1	1	2	10.7	9	8	6	10.7	1	2	10.7	24	72
1	1	1	1	1.2	1.6	1.6	0	1.6	1	1			
1	2	1	1	1.2	9.7	10	9	10	1	1			
1	1	1	1	1.2	10.6	4	2.6	10.6	1	2	10.6	48	24
1	1	1	1	0	0	1.3	2	2	1	1			
1	2	1	1	8.1	9.4	10.7	7	10.7	1	2	8.1	24	120
1	2	1	1	7.8	10	13	9	13	1	2	10	48	120
1	1	1	1	3.4		7.9	5.7	7.9	1	1			
1	1	1	1	3.4	5	7.7	7	7.7	1	1			
1	1	1	1	7.6	7	5.5	5	7.6	1	1			
1	1	1	1	7	8	9	7	9	1	1			
1	1	1	1	7	8.4	10	7	10	1	1			
1	1	1	1	2.8	7.5	11.2	6	11.2	1	2	11.2	72	24
1	2	1	1	7.7	9	8	6	8	1	2	7.7	24	120
1	1	1	2	5					1	1			
1	1	1	1	0	0	0	0		1	1			
1	1	2	1	5.7	9.2	5.1	6	9.2	1	2	9.2	48	24
1	1	1	1	3	7.8	6	5	7.8	1	2	7.8	48	168
1	1	1	1	0	0	1.2	2	2	1	1			
1	1	1	1	4	7.7	8.6	9	9	1	1			
1	1	1	1	6.6	13.2	9	7	13.2	1	2	13.2	48	24
1	1	1	1	0	1.6	2	3	3	1	1			
1	1	1	1	5	9	13	10	13	1	2	13	72	48
1	1	1	1	0	0	1.8	0	1.8	1	1			
1	1	1	1	0	2.4	4	6.8	6.8	1	1			
1	1	1	1	0	2	3.4	4.7	4.7	1	1			
1	1	1	1	3.8	4.9	6			1	1			
1	1	1	1	5	7.7	8.4			1	1			
2	1	1	1	11.5	14.8	10	7.8	14.8	1	2	14.8	48	48
1	1	1	1	7.7					1	1			
1	1	1	1	2						1			
1	1	1	1	4	6	7.6	8.2	8.2	1	1			

1	1	1	1	5.6	8	12.5	6	12.5	1	2	12.5	72	24
1	1	1	1	5.6					1				
1	1	1	1	6					1	2	6	24	
1	1	1	1	2	4.8				1	1			
1	1	1	1	8.7	11	9	8	11	1	2	11	48	120
2	1	1	1	11.5	14.8	10	7.8	14.8	1	2	14.8	48	48
1	1	1	1	4.6	8	13.3	20	20	1	2	13.3	72	96
1	1	1	1	1.4	2.5	3	6	6	1	1			
1	1	1	1	0	2.8	4	5	5	1	1			
1	2	1	1	2.8	3.4	6.3			1	1			
1	2	1	1	0	1.8	3.8	5		1	1			
1	2	1	1	2.8	4.8	6.0	9.6	9.6	1	1			
1	1	1	1	0		7.8			1	1			
1	1	1	1	1.2	2.6	4.0	4.2	4.2	1	1			
1	2	1	1	3.4	6.3	7.7	8.4	8.4	1	1			
1	2	1	1	9.5	12.5	14.5	12	14.5	1	1			
1	1	2	1	4.8	7.7	7.0	2.6	7.7	1	1			
1	1	1	1	1.2	10.6	4	2.6	10.6	1	2	10.6	48	24
1	1	1	1	0	0	1.3	2	2	1	1			
1	2	1	1	8.1	9.4	10.7	7	10.7	1	2	8.1	24	120
1	2	1	1	7.8	10	13	9	13	1	2	10	48	120
1	1	1	1	3.4		7.9	5.7	7.9	1	1			
1	1	1	1	3.4	5	7.7	7	7.7	1	1			
1	2	1	1	4.8	7.0	12.7	13.2	13.2	1	1			
1	1	1	1	0	2.0	2.8	0	2.8	1	1			
1	2	1	1	0	2.6	3.0			1	1			
1	2	1	1	7.9		8.6			1	1			
1	1	1	1	1.4	2.0	2.0	0	2	1	1			
1	1	1	1	9.8	12.8	14.3	8.4	14.3	1	2	12.8	48	72
1	1	1	1	2.8	5.8	7.6	9	9	1	1			
1	1	1	1	3.6	5.2	7.7	10	10	1	1			
1	1	1	1	3.2	6.0	8.4	10	10	1	1			
1	2	1	1	5	7.2	9.4	12	12	1	1			

1	2	1	1	1.6	3.0	4.8	7.7	7.7	1	1			
1	1	1	1	5	7.0	8.6	7	8.6	1	1			
1	1	1	1	5	7.3	10.7	7.2	10.7	1	2	10.7	72	48
1	1	1	1	0	0.0	2.4	5	5	1	1			
1	1	1	1	3.8	6.9	8.0	10.2	10.2	1	1			
1	2	1	1	0	0.0	1.6	0		1	1			
1	2	1	1	5.6	7.0	9.0	6	9	1	1			
1	1	1	1	0	2.6	3.0	2	3	1	1			
1	1	1	1	2	3.0	2.0	0	3	1	1			
1	1	1	1	3.2	5.0	7.8	8	8	1	1			
1	1	1	1	0	2.2	3.0	3.8		1	1			
1	2	1	1	2.8	5.0	8.7	6	8.7	1	1			
1	2	1	1	5	7.0	8.0	10	10	1	1			
1	1	1	1	4	5	10.2	5.5	10.2	1	2	10.2	72	48
1	1	1	1		5.6	9.2	17.9	17.9	1	2	17.9	72	48
1	1	1	1	2		4.0	7.8	7.8	1	1			
1	1	1	1	1.8		3.0	3.8		1	1			
1	1	1	1	8	12	14.0	11.3	14	1	2	12	48	168
1	1	1	1	2	3	5.0			1	1			
1	1	1	1	7	10	15.1	7.7	15.1	1	2	15.1	72	24
1	2	1	1	7.8	10.2	16.0	11	16	1	2	16	72	48
1	2	1	1	2		9.7	8.8	9.7	1	1			
1	2	1	1	3		10.0	11	11	1	1			
1	1	1	1	3	4.9	6.0	7.8		1	1			
1	1	2	1	8	17.7	13.1	11	17.7	1	2	17.7	48	96
1	1	2	1	7.5	9	11.2	12	12	1	1			
1	2	1	1	6	8.7	10.0	12		1	1			
1	2	1	1	7.2	5.8	8.0	9	9	1	2	7.2	24	120
1	1	1	1	5	7.8	10.1	6.6	10.1	1	2	10.1	72	72
1	1	1	1	3	4	7.7	5	7.7		1			
1	1	1	1	4	8	6.5	7.2	7.2	1	2	8	48	120
1	1	1	1		2.6		7.5	7.5	1	1			
1	1	1	1	1.8	2.9		7.8	7.8	1	1			

1	1	1	1	0	3	5.2	7.7	7.7	1	1			
1	1	1	1	2.8	4	6.8	7.8	7.8	1	1			
1	1	1	1	2.8	5	8.0	10.2	10.2	1	2	10.2	120	48
1	1	2	1	7.6	10	18.6	9.9	18.6	1	2	10	48	120
1	1	1	1	5	7.9	10.9	17.2	17.2	1	2	17.2	120	48
1	1	1	1	4.8	8	10.2	12	12	1	1			
1	1	1	1	0	0	1.6	0	1.6	1	1			
1	1	1	1	3.6	8.9				1	1			
1	2	1	1	1.8	3.8	5.0	12.9	12.9	1	2	10	96	96
1	1	1	2	11.7	9	7.7	4	11.7	1	2	11.7	24	48
1	2	1	1	5.6	8.9	11.4	8	11.4	1	2	11.4	72	48
1	1	1	1	4	6.2	8.0	10	10	1	1			
1	1	1	1	5	7.9	11.2	17.6	17.6	1	2	17.6	120	48
1	2	1	1	6	9	12.8	8.5	12.8	1	1			
1	2	1	1	6.5	11.8	12.5	11.2	16.4	1	2	16.4	96	24
1	1	1	2	8	10	12.0	7.9	13.5	1	2	13.5	96	24
1	1	1	1	1.4	3.8	6.0	7.4		1	1			
1	1	1	1	0	2.6	4.0	4	4	1	1			
1	1	1	1	4	6	9.2	8.7	9.2	1	1			
1	1	1	1	3.1	5.2	6.0	7.2	7.2	1	1			
1	1	1	1	2	4	4.6	4.2	4.6	1	1			
1	1	1	1	0	0	1.4	0	1.4	1	1			
1	1	1	1	0	0	0.0	0	0	1	1			
1	2	1	1	3.2	4.6	6.0	7.2		1	1			
1	1	1	1	1.8	4.9	7.0	8.8		1	1			
1	2	1	1	5.2	7.2	9.8	11.4	11.4	1	1			
1	1	1	1	6.4	8.1	10.0	11.6	11.6	1	1			
1	1	1	1	3.6	4.8	7.7		7.7	1	1			
1	1	1	1	5.2	7.7	8.0	8.8	8.8	1	1			
1	1	1	1	0	0	1.2	2.6	2.6	1	1			
1	1	1	1	3.8	5	7.7			1	1			
1	1	1	1	0	11.7	8.0	1.6	11.7	1	2	11.7	60	24
1	1	1	1	3.1	4.6	6.7	9	9	1	2	9	120	24

1	2	1	1	7.8	15.5	9.2	2.8	15.5	2	2	15.5	48	48
1	1	1	1		6	6.8			1	1			
1	2	1	1	7.8	9	10.6	12.8	12.8	1	1			
1	1	1	1	2	5.6	8.9	11.1	11.1	1	1			
1	1	1	1	0	0	0.0	0	0	1	1			
1	1	1	1	1.4	5	7.8	7.9	7.9	1	1			
1	2	1	1	12	11.2	10.0	12	12	2	2	12	24	120
1	2	2	1	13.5	11.9	10.9	9	13.5	2	2	13.5	24	96
1	2	1	1	10	8	5.0	7.8	10	1	2	10	24	48
1	1	1	1	7.7	3	1.6			1	2	7.7	24	48
1	1	1	1	3.2	6.0	8.4	10	10	1	1			
1	2	1	1	5	7.2	9.4	12	12	1	1			
1	2	1	1	1.6	3.0	4.8	7.7	7.7	1	1			
1	1	1	1	5	7.0	8.6	7	8.6	1	1			
1	1	1	1	5	7.3	10.7	7.2	10.7	1	2	10.7	72	48
1	1	1	1	0	0.0	2.4	5	5	1	1			
1	1	1	1	3.8	6.9	8.0	10.2	10.2	1	1			
1	2	1	1	0	0.0	1.6	0		1	1			
1	2	1	1	5.6	7.0	9.0	6	9	1	1			
1	1	1	1	0	2.6	3.0	2	3	1	1			
1	1	1	1	2	3.0	2.0	0	3	1	1			
1	1	1	1	3.2	5.0	7.8	8	8	1	1			
1	1	1	1	0	2.2	3.0	3.8		1	1			
1	2	1	1	2.8	5.0	8.7	6	8.7	1	1			
1	2	1	1	5	7.0	8.0	10	10	1	1			
1	1	1	1	4	5	10.2	5.5	10.2	1	2	10.2	72	48
1	1	1	1		5.6	9.2	17.9	17.9	1	2	17.9	72	48
1	1	1	1	2		4.0	7.8	7.8	1	1			
1	1	1	1	7	10	15.1	7.7	15.1	1	2	15.1	72	24
1	2	1	1	7.8	10.2	16.0	11	16	1	2	16	72	48
1	1	1	1	1.4	3.8	6.0	7.4		1	1			
1	1	1	1	0	2.6	4.0	4	4	1	1			
1	1	1	1	4	6	9.2	8.7	9.2	1	1			

1	1	1	1	3.1	5.2	6.0	7.2	7.2	1	1			
1	1	1	1	2	4	4.6	4.2	4.6	1	1			
1	1	1	1	0	0	1.4	0	1.4	1	1			
1	1	1	1	0	0	0.0	0	0	1	1			
1	2	1	1	3.2	4.6	6.0	7.2		1	1			
1	1	1	1	1.8	4.9	7.0	8.8		1	1			
1	2	1	1	5.2	7.2	9.8	11.4	11.4	1	1			
1	1	1	1	6.4	8.1	10.0	11.6	11.6	1	1			
1	1	1	1	3.6	4.8	7.7		7.7	1	1			
1	1	1	1	5.2	7.7	8.0	8.8	8.8	1	1			
1	1	1	1	0	0	1.2	2.6	2.6	1	1			
1	1	1	1	3.8	5	7.7			1	1			
1	1	1	1	0	11.7	8.0	1.6	11.7	1	2	11.7	60	24
1	1	1	1	3.1	4.6	6.7	9	9	1	2	9	120	24
1	1	1	1	2	3	5.0			1	1			
1	1	1	1	7	10	15.1	7.7	15.1	1	2	15.1	72	24
1	1	1	1	0	0	1.6	3.6	3.6	1	1			
1	1	1	1	0	0	2.6	3	3	1	1			
1	1	1	1	0	0	2.0	3		1	1			
1	2	1	1	4	6.9	11.4	13.6	13.6	1	1			
1	2	1	1	4	7.6	9.7	11.6	13.6	1	1			
1	1	1	1	7.9	9.2	9.0	8.5	9.2	1	1			
2	1	1	1	10	14	18.0	8	18	1	2	14	48	72
1	1	1	1	0	4	8.0	10	10	1	1			
1	1	1	1	2.6	3.8	9.0	7.3	9	1	2	9	72	96
1	1	1	1	0	0	1.6	2	2	1	1			
1	1	1	1	0	0	2.0	0	2	1	1			
1	1	1	1	3.6	7.8	9.4	8	9.4	1	1			
1	1	1	1	3.2	6.2	9.0	10.5	10.5	1	1			
1	1	1	1	4	7.6	8.3	7.5	10.5	1	2	8.3	72	120
1	1	1	1	0	6.8	7.8	7.1	7.8	1	2	6.8	48	168
1	1	1	1	2.4	6.8	8.9	9.5	9.5	1	1			
1	1	1	1	3	8	10.2	4.5	10.2	1	2	10.2	72	48

1	2	1	1	7.6	10.6	14.0	11.5	14	2	2	14	72	72
1	2	1	1	8	15.9	12.0	7.9	14	2	2	15.9	48	72
1	1	1	1	0	5	7.8	12	12	1	1			
1	1	1	1	0	3.8	8.0	10	10	1	1			
1	2	1	1	2	4.8	10.0	6	10	1	2	10	72	72
1	1	1	1	3.8	5.2	6.8	9.7	9.7	1	1			
1	1	1	1	2.4	5	7.2	9	9	1	1			
1	1	1	1	1.6	2	3.0	4	4	1	1			
1	1	1	1	2.9	4	6.7	8	8	1	2	8	120	24
1	2	2	1	3.4	5.8	8.2	10.1	10.1	1	1			
1	1	1	1	0	2	5.0	6.2	6.2	1	1			
1	1	1	1	3.8	13.6	12.5	8	13.6	1	2	13.6	48	48
1	1	1	1	3.2	5	6.5	7	8	1	1			
1	2	1	1	0	0	1.8	2		1	1			
1	1	1	1	3	5	6.2	8	8	1	1			
1	2	1	1	0	3.4	6.1	9.6	9.6	1	1			
1	1	1	1	2.6	3.8	10.2	4	10.2	1	2	10.2	72	48
1	1	1	1	4	6.8	10.7	12.2	12.2	1	1			
1	1	1	1	4	7.7	9.0	2.4	9	1	2	9	72	48
1	2	1	1	3.2	4.6	6.0	7.2		1	1			
1	1	1	1	1.8	4.9	7.0	8.8		1	1			
1	2	1	1	5.2	7.2	9.8	11.4	11.4	1	1			
1	1	1	1	6.4	8.1	10.0	11.6	11.6	1	1			
1	1	1	1	3.6	4.8	7.7		7.7	1	1			
1	1	1	1	5.2	7.7	8.0	8.8	8.8	1	1			
1	1	1	1	0	0	1.2	2.6	2.6	1	1			
1	1	1	1	3.8	5	7.7			1	1			
1	1	1	1	0	11.7	8.0	1.6	11.7	1	2	11.7	60	24
1	1	1	1	3.1	4.6	6.7	9	9	1	2	9	120	24
1	1	1	1	2	3	5.0			1	1			
1	1	1	1	7	10	15.1	7.7	15.1	1	2	15.1	72	24
1	1	1	1	0	0	1.6	3.6	3.6	1	1			
1	1	1	1	0	0	2.6	3	3	1	1			

1	1	1	1	0	0	2.0	3		1	1			
1	2	1	1	5	7.2	9.4	12	12	1	1			
1	2	1	1	1.6	3.0	4.8	7.7	7.7	1	1			
1	1	1	1	5	7.0	8.6	7	8.6	1	1			
1	1	1	1	5	7.3	10.7	7.2	10.7	1	2	10.7	72	48
1	1	1	1	0	0.0	2.4	5	5	1	1			
1	1	1	1	3.8	6.9	8.0	10.2	10.2	1	1			
1	2	1	1	0	0.0	1.6	0		1	1			
1	2	1	1	5.6	7.0	9.0	6	9	1	1			
1	1	1	1	0	2.6	3.0	2	3	1	1			
1	1	1	1	2	3.0	2.0	0	3	1	1			
1	1	1	1	3.2	5.0	7.8	8	8	1	1			
1	1	1	1	0	0	1.6	2	2	1	1			
1	1	1	1	0	0	2.0	0	2	1	1			
1	1	1	1	3.6	7.8	9.4	8	9.4	1	1			
1	1	1	1	3.2	6.2	9.0	10.5	10.5	1	1			
1	1	1	1	4	7.6	8.3	7.5	10.5	1	2	8.3	72	120
1	1	1	1	0	6.8	7.8	7.1	7.8	1	2	6.8	48	168
1	1	1	1	2.4	6.8	8.9	9.5	9.5	1	1			
1	1	1	1	3	8	10.2	4.5	10.2	1	2	10.2	72	48
1	1	1	1	0	0.0	2.4	5	5	1	1			
1	1	1	1	3.8	6.9	8.0	10.2	10.2	1	1			
1	2	1	1	0	0.0	1.6	0		1	1			
1	2	1	1	5.6	7.0	9.0	6	9	1	1			
1	1	1	1	0	2.6	3.0	2	3	1	1			
1	1	1	1	2	3.0	2.0	0	3	1	1			
1	1	1	1	3.2	5.0	7.8	8	8	1	1			
1	1	1	1	0	2.2	3.0	3.8		1	1			
1	2	1	1	2.8	5.0	8.7	6	8.7	1	1			
1	2	1	1	5	7.0	8.0	10	10	1	1			
1	1	1	1	4	5	10.2	5.5	10.2	1	2	10.2	72	48
1	1	1	1		5.6	9.2	17.9	17.9	1	2	17.9	72	48
1	1	1	1	2		4.0	7.8	7.8	1	1			

1	1	1	1	7	10	15.1	7.7	15.1	1	2	15.1	72	24
1	1	2	1	5.7	9.2	5.1	6	9.2	1	2	9.2	48	24
1	1	1	1	3	7.8	6	5	7.8	1	2	7.8	48	168
1	1	1	1	0	0	1.2	2	2	1	1			
1	1	1	1	4	7.7	8.6	9	9	1	1			
1	1	1	1	6.6	13.2	9	7	13.2	1	2	13.2	48	24
1	1	1	1	0	1.6	2	3	3	1	1			
1	1	1	1	5	9	13	10	13	1	2	13	72	48
1	1	1	1	0	0	1.8	0	1.8	1	1			
1	1	1	1	0	2.4	4	6.8	6.8	1	1			
1	1	1	1	0	2	3.4	4.7	4.7	1	1			
1	1	1	1	3.8	4.9	6	8		1	1			
1	1	1	1	5	7.7	8.4	8		1	1			
1	1	1	1	1.2	3	4	5.2		1	1			
1	2	1	1	0	1	3.8	4.6	4.6	1	1			
1	1	1	1	3.8	7	9.2	9	9.2	1	1			
1	1	1	1	5.6	8	11.9	13.5	13.5	1	1			
1	1	1	1	4.8	9.3	12	7.8	12	1	2	12	72	48
1	1	1	1	2.8	7.9	10.2	12.8	12.8	1	1			
1	1	1	1	3.6	5	5.4	4	5.4	1	1			
1	1	1	1	0	2	2.6	3	3	1	1			
1	1	1	1	0	1.6	2	1.8	2	1	1			
1	1	1	1	0	0	0	0		1	1			
1	1	1	1	1.2	3	3.4	4	4	1	1			
1	1	1	1	3.4	7.7				1	1			
1	1	1	1	0	2.3	8	5	8	1	2	8	72	48
1	1	1	1	0	3.6	10.2	7	10.2	1	2	8	72	48
1	2	1	1	5	9	14.8	7.8	14.8	1	2	14.8	72	24
1	1	1	1		2	5	7.8	9	1	2	7.8	120	72
1	2	1	1	3	7.8	7	4.8	7.8	1	2	7.8	48	72
1	2	1	1	2.8	7.9	5	6	7.9	1	2	7.9	48	96
1	1	1	1	5	7.7	12.7	4.4	12.7	1	2	12.7	48	48
1	1	2	1	3	6.5	4	7	7	1	2	6.7	48	72

1	1	1	1	5.6	8.9	13.3	10.8	13.3	1	2	13.3	72	72
1	1	1	1	0	5	7.1	12.3	12.3	1	1			
1	1	2	1	5.4	9.7	7.8	7	9.7	1	2	9.7	48	72
1	2	1	1	10.5	8.3	7.2	5	10.5	1	2	10.5	24	120
1	2	1	1	7.8	7	9	6	9	1	2	7	24	144
1	2	1	1	11.1	8				2	2	11.1	24	
1	1	1	1	4.2	10.6	8	6.5	10.6	1	2	10.6	48	72
1	1	1	1	4	6	9	11.8	11.8	1	1			
1	1	2	1	6.4	9	13	8	7	1	2	13	72	72
1	1	1	1	4.2	6.7	7.2	9.8	9.8	1	1			
1	2	1	1	5.8	8	12.6	10	12.6	1	1			
1	1	1	1	2	6.7	8.2	9.2	9.2	1	1			
1	1	1	1	2.8	4	7	8.5		1	1			
1	1	1	1	7.7	9.7	12.3	15.2	15.2	1	2	15.2	120	24
1	1	1	1	2	5	9	11.4	11.4	1	1			
1	1	1	1	2.2	3	4			1	1			
1	2	1	1	0	2.4	5	7.9	7.9	1	1			
1	1	1	1	1.6	5.5				1	2	5.5	48	
1	1	1	1	1.4	2.2	3.8	6.4	7.6	1	2	7.6	144	24
1	1	1	1	2.8	6.1	7.8	9.6	9.6	1	1			
1	2	1	1	8.5	8	7		8.5	1	2	8.5	24	72
1	1	1	2	6.2	11.7	12.5	14.6	14.6	1	1			
1	2	1	1	7.2	11.2	15.4	10	15.4	1	2	15.4	72	24
1	1	1	1	5.4	7.2	8.5	7	8.5	1	1			
1	1	1	1	3.2	7.4	9	11	11	1	1			
1	1	1	1	2.9	4	7.0	8	8	1	2	8	120	24
1	2	2	1	3.4	5.8	8.2	10.1	10.1	1	1			
1	1	1	1	0	2	5.0	6	6.2	1	1			
1	1	1	1	3.8	13.6	12.5	7.2	13.6	1	2	13.6	48	48
1	1	1	1	3.2	5	6.5	7	8	1	1			
1	2	1	1	0	0	1.8	3.1	3.1	1	1			
1	1	1	1	0	0	2.6				1			
1	2	1	1	4	7	11.5	9	11.5	1	2	11.5	72	48

1	2	1	1	3.2	5	7.2	9.8	9.8	1	1			
1	1	1	1	2.3	5				1	2	5	48	
1	1	1	1		4	9.6	9.8		1	1			
1	1	1	1	4.8	10.2	16.8	12	16.8	1	2	16.8	72	48
1	1	1	1	5	7.7	7.7	4	7.7	1	2	7.7	48	48
1	1	1	1	4.8	8	2.0	7.9	7.7	1	2	8	48	24
1	1	1	1	5.9	7.4	9.2			1	1			
1	2	1	1	6.3	5.5	7.7	4	7.7	1	2	6.3	24	24
1	1	1	1	5.5	8.9	6.8	2.8	8.9	1	2	8.9	48	72
1	1	1	1		7.3	9.2	6		1	2	7.3	48	48
1	1	1	1	3	6.7				1	2	6.7	48	

DVET	Significant HBIL	Neuro assess	Outcome
	1	1	1
	2	1	1
	1	1	1
	1		2
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	2	1	1
	2	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1

	1	1	1
	1	1	1
	1	1	1
	1		1
	1	1	1
	1	1	1
	1	1	1
	2		1
	1	1	1
	1	1	1
	1	1	1
			1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
2.0	2	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	2	1	1
	1	1	1
	1	1	1
	1	1	
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1

1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
		2	
1	1	1	CL(P)
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1		Achondroplasia
1	1	1	
1	1	1	
1	1	1	
		2	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1		1	

1		1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
2	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1

1	1	1	
1	1	1	
2	1	1	
1		1	
1	1	1	
1	1	1	
1		1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
		2	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1		2	Pul he,hypoglycemia
2	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	

1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
2		2 EPT
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
2	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1

	1	1	1
2	2	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
2	2		1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1

1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
		2	Hypoglycemia
1	1	1	
1	1	1	
		2	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	

1	1	1
1	1	1
1	1	1
2	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
2	1	1
1		2 ivh
1	1	1
1	1	1
1	1	1
2	1	1
1	1	1
1	1	1
1	1	1
1	1	1
2	1	1
1	1	1
1	1	1

1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1

1	1	1
1	1	1
1	1	1
1	1	1
1		2
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
		2
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1

1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
2	1	1
2	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	2
1		2
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1		2
1		2
1	1	1

1	1	1
1		2
1		2
1		2
1	1	1
1	1	1
2	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
2	1	1
2	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1

1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
2	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1

	1	1	1
	1	1	1
	1	1	1
2	2	1	1
	1	1	1
	1	1	1
	1	1	1
	1		2
	2	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1
	1	1	1

1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
2	1	1
2	1	1
1	1	1
2		2
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1

1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
2	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1		2
1	1	1
1	1	1
1	1	1

1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1

1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1		1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1

1	1	1
1	1	1
1	1	1

1	1	1
1	1	1
1	1	1
1	1	1
2	1	1
2		2
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1		2
1	1	1
1		2
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1		2
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1		2
1	1	1

1	1	1
1		2
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1	1	1
1		2

10. Bibliography

1. World Health Organization, International statistical classification of diseases and related health problems, tenth revision, World Health Organization, Geneva, 1992.

2. World Health Organization, Low Birth Weight: A tabulation of available information, WHO/MCH/92.2, World Health Organization, Geneva, and UNICEF, New York, 1992.

3. www.childstats.gov/americaschildren/health1.asp.accessed on June 20,2012.

4. United Nations Childrens Fund (UNICEF). The State of the World's Children 2004. New York; Unicef:2003.

5. Report of the National Neonatal Perinatal Database. Report 2002-2003. NNPD Network.

2005 Jan; http://www.newbornwhocc.org/pdf/nnpd_report_2002-03.PDF

6. . Antonisamy B, Sivaram M, Richard J, Rao PSS: Trends in Intra-uterine Growth of Single Live Births in Southern India. J Trop Pediatr 1996, 42:339-341.

7. Pinheiro A, David A, Joseph B: Pregnancy weight gain and its correlation to birth weight. Indian J Med Sci 2001, 55:266-270

8. Kumar RK. Neonatal jaundice. An update for family physicians. Australian Family Physician 1999; (28) 7:679–82.

9. Maisels MJ,Watchko JF. Treatment of jaundice in low birthweight infants. Arch Dis Child Fetal Neonatal Ed 2003;88:F459–F463

10.Almeida MF. When should we start phototherapy in preterm newborn infants?. Journal de Pediatria 2004;80(4):285–90.

11. American Academy of pediatrics, Subcommitte on Hyperbilirubinemia. Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. Pediatrics 2004;114(1):297-316.

12. Deorari AK, Agarwal R, Paul VK. Management of infants with intrauterine growth restriction. Indian J Pediatr.2008:75(2):171-174

13. Kawade N, Onishi S.The prenatal and postnatal development of UDP-glucuronyltransferase activity towards bilirubin and the effect of premature birth on this activity in the human liver. Biochem. J. 1981 196(1). 257-260.

14. World Health Organization Expert Group on prematurity 1950 Final report, WHO, Geneva

15a.Mc Burnley R.The undernourished full term infant. A case report. West Journal of Obstetrics and Gynecology 1947, 55: 363-370.

15. Maisels MJ. Jaundice. In: Avery GB, Fletcher MA, MacDonald MG, eds. Neonatology: pathophysiology and management of the newborn.Philadelphia: JB Lippincott, Co, 1999:765–819.

16.Gruenwald P. Growth of the human fetus.I.Normal growth and its variation. American Journal Obstetrics and Gynecology.1966.94:112-121

17.Lin C,Santolaya F.Current concepts of fetal growth restriction: Part l .Causes, classification and Pathophysiology.Obstetrics and Gynecology1988.92:1044-1055.

18. Watchko J, Claasen D. Kernicterus in premature infants: current prevalence and relationship to NICHHD phototherapy study exchange criteria. Pediatrics 1994;93 :996–999.

19.Narang A, Kumar P,Kumar R. Neonatal jaundice in very low birth weight babies.Indian J Pediatr.2001;68(4):307-309

20. Lavanya KR,Jaiswal A,Reddy P,Murki S.Predictors of significant jaundice in latepreterm infants .Indian Pediatr.2012:49(9):717-720

21Gartner LM, Snyder RN, Chabon RS, et al. Kernicterus: high incidence in premature infants with low serum bilirubin concentration. Pediatrics 1970;45:906.

22 Watchko JF, Oski FA. Kernicterus in preterm newborns: past, present and future. Pediatrics 1992;90:707–15.

23 Watchko JF, Maisels MJ. Jaundice in low birth weight infants: pathobiology and outcome. Arch Dis Child Fetal Neonatal Ed 2003;00:F000.

24.Cashore W J. Bilirubin and jaundice in micropremie.Clinics in Perinatology.2000.27:171-179.

25. Cockington RA, Drew JH, Eberhard A. Outcomes following the use of rational guidelines in the management of jaundiced newborn infants. Aust Paediatr J. 1989 Dec;25(6):346-50.

26. Mishra S, Agarwal R, Deorari AK, Paul VK. Jaundice in the newborns. Indian J Pediatr. 2008 Feb;75(2):157-63.

27. Ives NK. Neonatal jaundice. In: Rennie JM, Roberton NRC, eds. Textbook of neonatology. New York: Churchill Livingston, 1999:715–32

28. Maisels MJ, Watchko JF, Bhutani VK, Stevenson DK. An approach to the management of hyperbilirubinemia in the preterm infant less than 35 weeks of gestation. J Perinatol. Sep;32(9):660-4.

29.Winnergren M,Winnergren G,Vilbergasson G. Obstetric characteristics and neonatal performance in a four-year small for gestational age population. Obstet Gynecol 1988;87:615.

30.Piper JM,Xenakis EM, McFarland M. Do growth retarded premature infants have different rates of perinatal mortality and morbidity than appropriately grown premature infants? Obstet Gynecol 1996:87:169.

31.Hawdon JM,Platt MPW. Metabolic adaptation in small for gestational age infants.Arch Dis Child 1993:68:262

32. Sarici SU, Serdar MA, Korkmaz A, Erdem G, Oran O, Tekinalp G, et al. Incidence, course, and prediction of hyperbilirubinemia in near-term and term newborns. Pediatrics. 2004;113:775-80.

33. Narang A, Gathwala G, Kumar P. Neonatal jaundice: an analysis of 551 cases. Indian Pediatr. 1997 May;34(5):429-32.

31 Levy A, Fraser D, Katz M, Mazor M, Sheiner E. Maternal anemia during pregnancy is an independent risk factor for low birthweight and preterm delivery. Eur J Obstet Gynecol Reprod Biol. 2005 Oct 1;122(2):182-6.

32. Xiong X, Buekens P, Alexander S, Demianczuk N, Wollast E. Anemia during pregnancy and birth outcome: a meta-analysis. Am J Perinatol. 2000;17(3):137-46.

33. Xiong X, Mayes D, Demianczuk N, Olson DM, Davidge ST, Newburn-Cook C, et al. Impact of pregnancy-induced hypertension on fetal growth. Am J Obstet Gynecol. 1999 Jan;180(1 Pt 1):207-13.

34. Ortigosa Rocha C, Bittar RE, Zugaib M. Neonatal outcomes of late-preterm birth associated or not with intrauterine growth restriction. Obstet Gynecol Int.2010:231842.

Annexure

Proforma

Profile of neonatal jaundice in low birth weight babies. Comparison of AGA and SGA subgroups

S No:

Name: Sex: Birth weight:

IP No:

Father's name: Education

Occupation:

Address

Phone:

Maternal age:

Ht: Wt: Prepregnancy: At delivery:

Consanguinity:

Blood group: Hb:

Previous siblings with NNH:

GDM: Hypothyroidism: PIH:

LMP: EDD: GA:

$1^{st}/2^{nd}$ trimester USG: Date: _____CRL/BPD: __mm =GA __Wks

Singleton/Multiple Gestation:

PIH: PROM:

Labour: Spontaneous Induced

Mode of delivery: Vaginal Caesarean:

Induction /Augmentation with oxytocin:

Prostaglandin: Presentation:

Birth weight: Apgar scores:

Gestational Age (NBS):

GA assigned: AGA/SGA

Length: OFC: Ponderal Index:

Mother side / Nursery: Indication for Nursery transfer:

Feeding: Urination: Meconium:

Birth trauma:

Rh Setting ABO setting:

Wt : 24hrs: 48hrs: 72 hrs Day5.

Jaundice in previous sibling:

Comorbidities:

Asphyxia

RDS : Sepsis:

BG:

	TSB:	PCV:	Visible jaundice/
Day 1(24-47 hrs)			
Day 2(48-71)			
Day 3(72-95)			
Day 5			

Phototherapy: Yes/ No Indication

Started on hrs of life Duration: Response:

DVET: Indication:

Cause of significant hyperbilirubinemia: Hemolysis / Non hemolysis

BIND: Yes/ No BERA at discharge:

Outcome: Discharged / Died at hrs of life Cause of death:

CONSENT FORM

I Ms/Mr._____ M/O//F/O, B/O _____

Sex_____Hosp. No._____ admitted in IOG,

Egmore on _____ was explained to by the doctor that my baby is being enrolled in the study "Profile of jaundice in LBW infants-Comparison between AGA and SGA subgroups"

"I am willing for my child to be enrolled in the study. The doctors have explained to me the nature and the purpose of the study.

I have given my consent only after completely understanding the details that were explained to me.

I am willing for my baby to be enrolled in this study without any ones compulsion.

I am fully aware that I can withdraw from the trial at any time during the study and routine care will be continued.

I have given my consent for drawing blood sample for biochemical analysis during the study if needed .

I have given this consent to be enrolled in this study with my full consciousness.

Signature of the Investigator Signature of Parent

Date :

Place: Chennai -8

RESEARCH INFORMATION SHEET

Title:

Profile of Neonatal Jaundice in Low Birth Weight Infants –Comparison between AGA and SGA subgroups

Neonatal jaundice is a significant problem in low birth weight babies. Capillary bilirubin will be measured through heel prick sampling which is a simple test requiring a drop of blood.

There is no compulsion. You can withdraw from the trial at anytime during the study. Your baby will continue to receive routine care given to a baby as per the hospital protocol. During the study, during the analysis of the results and during the publication of the study your identity will not be revealed.

The outcome of the study will be revealed to you after the completion of the study if requested for.

Signature of the Investigator Signature of Parent

Contact Address:

Dr. Karvendhan R

II yr, D.M. Neonatology post graduate

I.C.H.&H.C, Egmore, Chennai- 8.

Mobile No.:9443972917.

Date :

Place : Chennai -8.

ஆராய்ச்சி தகவல் மற்றும் ஒப்புதல் படிவம்

ஆராய்ச்சியின் தலைப்பு: *குறைந்த எடை உள்ள குழந்தைகளில் ஏற்படும் மஞ்சட் காமாலை –கர்ப்ப காலதிற்கு ஏற்ற எடை உள்ள குழந்தைகளுக்கும்*

கர்ப்ப காலதிற்கு குறைந்த எடை உள்ள குழந்தைகளுக்கும் ஒப்பீடு.

ஆராய்ச்சி சேர்க்கை எண்:

குழந்தையின் பெயர்: மருத்துவமனை எண்:

தந்தையார் பெயர்:

பெரும்பாலான பச்சிளம் குழந்தைகளுக்கு மஞ்சட் காமாலை பிறந்த முதல் வாரத்தில் ஏற்படுகிறது.குறைந்த எடை (2500 கிராமுக்கு கீழ்) உள்ள குழந்தைகளுக்கு இது பெரும்பாலும் மருத்துவம் தேவைப்படும் அளவுக்கு அதிகமாகக் கூடும். உங்கள் குறைந்த எடை உள்ள குழந்தை இந்த ஆராய்ச்சியில் சேர்க்கப்பட்டால் அவளுடைய பிலிரூபின் அளவு 24 மணி,48 மணி ,72 மணி மற்றும் ஐந்தாம் நாள் சோதிக்கப்படும். பிலிரூபின் அளவு அதிகமாக இருந்தால் ஒளிச்சிகைச்சையோ அல்லது இரத்த மாற்று சிகிச்சையோ தேவைக்கேற்ப செய்யப்படும்.

நீங்கள் இந்த ஆராய்ச்சியில் பங்குபெற விரும்பவில்லை யென்றாலும் உங்கள் குழந்தைக்கு உரிய சிகிச்சை அளிக்கப்படும். நீங்கள் இந்த ஆராய்ச்சியில் பங்கு பெற வேண்டும் என்று எந்த கட்டயமும் கிடையாது

மருதவர் கையொப்பம் பெற்றோர் கையொப்பம்